

School Board Journal

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The Teacher's Plea: Don't Forget the Schools.



The Youngest School Board Member

Isabel Underwood Blake, Oak Park, Ill.

Mrs. Robert Harvey was elected to the school board, with grave misgivings on the part of her fellow townsmen. She was very young. In fact, only two ameliorations of her youthfulness saved her; the major fact that she was married, and the minor consideration that in another town she had herself been a high school teacher. "It will help her to understand the children," said one apologetic voter after another.

Mrs. Harvey's having been a high school teacher must no doubt have helped her to understand the children; what was soon most evident to the other members of the school board, however, was that it helped her to understand the teachers.

The school board was elected just before the spring vacation, and had immediately to set about securing the next year's teaching force. The superintendent wrote to "the city" for candidates from the teachers' agencies, and presently candidates arrived, one at a time, to be inspected and possibly, rejected. It was the superintendent, really, who did the inspecting and recommending. As a matter of form, the candidate was introduced to the president of the school board, and to as many other board members as was immediately convenient; the board voted according to recommendations. And here Mrs. Robert Harvey, for all that she was very young, and a new member, proved intractable.

"I cannot vote on someone whom I have not seen," she declared. "I want to know on what day the candidate is expected; I shall be at home that day, and shall give up my time to meeting her." A further declaration Mrs. Harvey made: "The train from 'the city' comes in at twelve," she figured, "and leaves at four. I shall be delighted to entertain each possible teacher at luncheon in my home. You can learn so much about a person," she added confidently, "eating creamed things on toast, with her."

"Are our teachers to sink or swim by the way they eat soup?" demanded a brusque member of the board. But in the end, Mrs. Harvey's standing invitation was accepted, and indeed "the way they ate soup" contributed to the board's election of candidates.

"She's ill-mannered," said Mrs. Harvey decisively, of one woman recommended as a "thoroughgoing disciplinarian," and against whom she voted. "I 'entertained' her, and sat with her, and listened to her for an hour and a half, and her manner and manners are unquestionably bad; I would not subject a child to her 'discipline'." Again, she said of a young college woman, against whom some urged "inexperience," "She is well taught. In ten minutes at the luncheon table she forgot to be frightened and shy, and she showed that she is full of enthusiasm, and is sincere, and has a quick, appreciative humor. She would be a teacher for a boy or girl to remember with gratitude."

Spring vacation passed, and the teaching force for the following year was made up.

"It was very good of you, and all that, having the possibilities to lunch at your house," said a

veteran board member to Mrs. Harvey, "but whatever made you want to do it?"

Mrs. Harvey smiled reminiscently. "In the first town in which I applied for a position as teacher," she recalled, "I was kept waiting in the superintendent's outer office for an hour. I did not know that I was hungry, but I knew that I felt queer; result, stage fright, and no engagement. At three o'clock I was wandering about the town, looking for a reasonable restaurant, and waiting again, for a train to take me away. I found a drug store and had some syrupy ice-cream before I left. In another town I was sent from store to business office, to meet the school board members; the president was a barber. I stood in his doorway, and he looked me over, and then he said, 'Well, I'll hire you.' In only one town did I actually meet a woman board member before being offered the position. The superintendent took me to her. She was in a little garden, cutting flowers, and she gave me some."

Quite a stickler for having the board meet the teachers was Mrs. Harvey. It was she who suggested, the following fall, that they meet socially at tea.

"There's something so unutterably social," she remarked with a twinkle, 'about a man at afternoon tea. It's as if he had time to bestow on his fellows.' Someone seconded her proposal. "Let's have it at the school," she proposed, "at four o'clock."

But to this Mrs. Harvey made objection. "Let's have it in a home—mine if you like, or anyone's. Tea made out of its accustomed place has a flat taste, and calls for wafers out of a pasteboard box. I'm for real tea—well-brewed tea, with cream and moist sandwiches."

An accusing member fixed her with a stern eye. "Are you not in favor of the 'school as a social center' movement?" she demanded.

Yes, Mrs. Harvey most emphatically was. "Only," she qualified, "not for the people who work there. Have us meet at half past four, and give the teachers a chance to breathe out the chalk dust and put on their pretty clothes!"

A peculiarity of Mrs. Harvey's, in meeting

the teachers socially, was that she never talked about the school. What she did talk of, to be sure, was usually applicable—a new book, something at the Opera House, a magazine she would like to lend, local politics, or a newsy item about a townsman or two. And she saw that others met the teachers socially; "I want you to know Miss —," she would suggest agreeably, it might be to the president of the woman's club, or to a holiday-making college girl, or more often than not, to a presentable young man. But never, never, did Mrs. Harvey add, "She is one of our teachers."

There were ways other than social, in which she met the teachers. Often she went to the school to see them, and there talked about their work. Not during classes, at first, nor in busy school hours, nor in those precious last minutes before the last bell.

"A board member once came to visit a school in which I was teaching," said Mrs. Harvey. "She was the wife of a former principal, and she arrived at eight-fifteen and sat between me and the door. I tried to maneuver past her, for there was a point in the day's lesson which I had saved to look up in a school reference book. But she overbore me, and sat thru three of my classes in succession, and in each of the three the point came up and caught me unprepared, and each time she sniffed. She left without saying goodbye."

So Mrs. Harvey at first appeared at school only at the end of a day—a Tuesday, or a Wednesday, and sat with a teacher in this room or that, and looked at the notebooks and papers that were offered her, and listened,—. It was she who encouraged the English teacher to submit to the superintendent an original list of books, and a plan for reading them that involved the public library and the interest of the librarians. It was she to whom the mathematics teacher outlined a practical course in business arithmetic, for which credit could be given at the local business college. With her the history teacher pleaded for the beginnings of a reference library, and a collection of prints, and a loan exhibit. And if, in those hours of talk of school business, the teacher's mantle sometimes slipped off, and she learned that little Miss Thain was lonesome but needed the money to send home, or that Miss Hazeltine wondered whether she wouldn't be happier married, why, Mrs. Harvey was discreet, and no one else the wiser. Later in the year she visited the classes, slipping quietly in, and seated at the back of the room; once she raised her hand and recited, to the intense joy of the members of the class.

Not appreciably less young was Mrs. Harvey when her term as member of the school board closed. She had upset no system, introduced no reorganization, started no building or buying project, advertised not at all herself, nor the board, nor the high school, but—"Of course, we must re-elect Mrs. Harvey," said one apologetic voter after another. "She understands so well."

WEAVING SONG.

The shuttle flies amain, amain,
The shuttle is a-flying;
It turns, it weaves, thru joy and pain,
Thru times of loss and times of gain,
'Mid laugh and sighing;
And thus the lengthening web appears,
The shuttles ever flying.

And Life's the web, it weaves, they say,
While shuttle is a-flying;
We may weave sunshine in and flowers,
We may weave in the fairest hours,
And airs replying;
The thought, the thread, are in our hand,
And shuttles ever flying.



NORTHEAST HIGH SCHOOL, KANSAS CITY, MO.
Chas. A. Smith, Architect for the Board of Education.

KANSAS CITY, MO., AND ITS SCHOOLS

I. I. Cammack, Superintendent of Schools

For the first time in the history of the Department of Superintendence, the annual meeting is to be held in a mid-western city. Of the 27 meetings since the reorganization of the Department in New York City in 1890, but one meeting, that of 1911, has been held as far west as the Mississippi River and that on its western bank at St. Louis. Of the 27 meetings, ten of them have been held on the Atlantic seaboard, seven south of the Ohio River and east of the Mississippi, and eight in the lake cities. It is a fitting recognition of the growing importance of the great west that the meeting this year should come to the metropolis of the Missouri River Valley.

As Kansas City for many years has been a railroad center where many lines converge and intersect, many superintendents and school people while traveling east or west, have passed thru it. The impressions received from the dilapidated old station that did service for over three decades and the unsightly bluffs standing above, were anything but pleasing and wholly misleading as to the real city located on the higher levels. To be fully appreciated, the city's business and industrial institutions, its beautiful homes, its parks and boulevards, must be seen to better advantage than is possible from a railroad station or thru the windows of a railway coach. Situated some seventy miles east of the geographical center of the United States near the center of one of the greatest agricultural regions of the world, on the southwestern bank of the Missouri where the river turns sharply from a southerly to an easterly direction and receives the waters of the Kansas River from the west, it is a focal point for the great southwest and is rapidly meeting the prophecies of future development which discerning men who in the past gave serious consideration to the development of this part of our country, foresaw.

The city at the mouth of the Kaw, (Kansas River) as it is often called, is really a dual city, Kansas City, Missouri, and Kansas City, Kansas. Contrary to the general impression the two cities lie on the same side of the great river on its southwestern bank. Neither is the division line between the two cities made by the Kansas River as the state line in passing thru the great stock yards and packing district, is marked by no natural feature. To those who have not kept pace with the growth of the southwest, it may be a surprise to know that "Greater Kansas City" is rapidly approaching the half million mark in population, there being now more than 300,000 in Kansas city, Missouri, and more than 100,000 in Kansas City, Kansas. Commercially, in its transportation system, in its financial transactions, in its industrial operations, it constitutes one great center.

As such, it is the logical market for the great west and southwest including the States of Kansas, Oklahoma, parts of Western Texas, New Mexico, Arizona, Colorado, Wyoming, much of Montana and some of the Dakotas, and Nebraska. That this is true is indicated by the territory which has been included in the Tenth Federal Reserve Bank District.

From the time of the completion of the first bridge across the Missouri River in 1869 until the present, Kansas City has been rapidly forging to the front as a railroad and industrial center. As the second largest railroad center of the United States, it now has sixteen trunk lines and 32 distinct subsidiary lines. Every day there are more than two hundred and sixty passenger trains entering and leaving the great railroad station carrying on an average of between twenty-five and thirty thousand people daily. Within the past five years, to accommodate this rapid development, the railroads have spent more than \$50,000,000 in terminals and in the passenger station which is the largest and

said by many to be the best equipped of any station in this country outside of New York City.

Within the past few years perhaps the feature that has been most marked has been the city's financial growth. Missouri has the distinction of being the only state containing two federal reserve banks. With one located in the city of St. Louis, the second was placed in the state only because the commercial importance of the great southwest demanded that it be placed here. The bank clearings on one day during January, 1917, exceeded \$30,000,000 while the weekly clearings have run to more than \$140,000,000, placing Kansas City as the fifth city in the United States in bank clearings, surpassing cities of more than double its population.

This advantageous location with its unsurpassed transportation facilities which includes service by river to the Mississippi and the gulf as well as by railroads, is rapidly placing Kansas City in the first rank. Already it is the greatest mule market in the world; likewise the greatest market for yellow pine and hay; also the greatest winter wheat market. In its live stock transactions and in its packing house products, it is second only to Chicago. In its flour products and flour milling capacity and as a grain market, it is third in the United States and holds the same rank in the low cost of living. Its other industries which are well represented amount in number to more than one thousand.

With 80 per cent of its population native born and 91 per cent white, Kansas City escapes many of the perplexing racial problems that exist in most large centers of population in this country. As a typical American city, located at the very center of the continent, it is affected by and has attracted to itself the influence that comes from the chivalry of the south, the culture and refinement of the east, and the in-

domitable push and energy of the west. Those who come within its sphere of influence commend it for its delightful home life as well as for its business activities. Its nineteen parks containing more than 2,600 acres with one of more than 1,200 acres conspicuous for its natural beauty, connected by a system of boulevards more than sixty miles in length, make it unsurpassed as a beautiful residential city.

In its educational system the city has been fortunate. The school district under state law is a corporation with six members on its board of directors. The district has the sole taxing power for school purposes being completely independent of control by the government of the municipality. While the school district of Kansas City, Missouri, is largely composed of the territory embraced within the city, it is not coterminous with the city's corporate limits. Two sparsely settled portions of the city, one lying in the east bottoms near the river, occupied chiefly by railroads and elevators, and the other at the extreme southeast beyond the Blue river, are not included in the school district. The territory lying between Kansas City and the city of Independence which because of its excellent transportation facilities has become thickly populated, has been made a part of the school district. The school district contains about 55 square miles while the area of the city is 58 square miles.

The freedom of the school district from the municipality, having independent taxing powers, makes it exempt from the ordinary political conditions usually prevalent in American cities. Members of the board of directors serve a term of six years, two being elected at each biennial election. The usual procedure is for each of the

two dominant political parties to place one name only in nomination. The two names are then placed on the party ballots of both parties so that election to the school board is not a matter of party contest. That such a scheme has attracted men of the highest standing and held them long in service which is rendered without compensation, is a matter of conspicuous note. One member served 26 years. Six members have served eighteen years and more, while the average term for the thirty members who have served and are now retired, has been over nine years. One member was president for a period of nineteen years.

A like stability with reference to management has existed in the officials who have administered the schools. Since 1869 there have been but three superintendents. The first, Mr. John R. Phillips began his term of service on the above mentioned date and resigned in 1874. From that time until 1913, the schools were under the direction of Dr. James M. Greenwood, an educator of international fame. With a board so selected and serving for such periods and with so few changes in administrative management, it is not strange that the schools have been remarkably free from the more or less radical changes usually accompanying unstable political conditions.

In one important respect the schools of Kansas City differ from those of other cities of like size. This difference consists in the completion of education in the elementary schools in seven years instead of eight. This length of time devoted to elementary education was established by Dr. Greenwood at the beginning of his term of service and has been followed ever since.

Owing to the many changes in the population of the rapidly growing city and the fact that many persons from rural communities entered the city whose children were over-age the average age of graduation from the elementary schools was really above what might be expected in a seven year system. As the population has become more settled and the pupils more regular in attendance, with more reliable records, it clearly appears that the work in the elementary grades is being done in about .8 of one year shorter time than in cities of average size with eight grade systems.

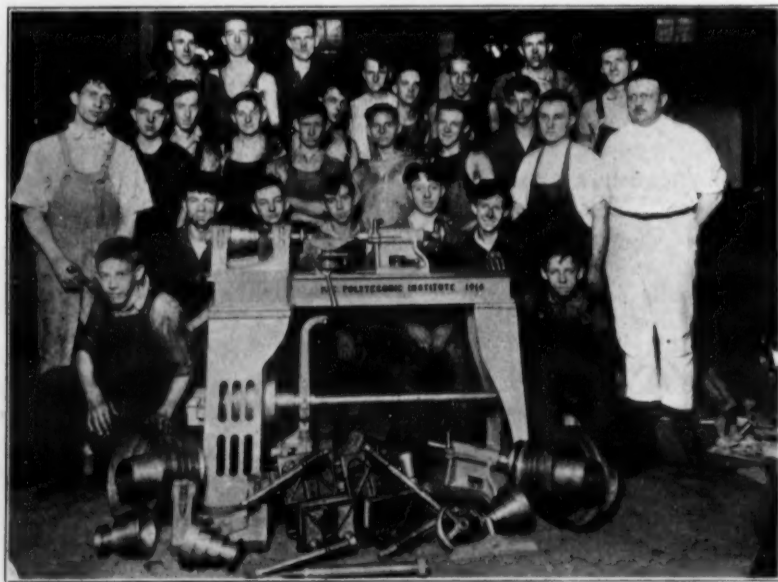
The secondary schools with a four year course based upon the seven year elementary course have been sending hundreds of students into the colleges of the United States, east and west, with success equal to that made by students from twelve year systems. One of the chief advantages of the seven year elementary course is the fact that a larger percentage of graduates of the elementary schools enter the high school. For many years from thirteen to fifteen per cent of the entire school population has been enrolled in the secondary schools. The records compiled by our department of research show that of all the children who enter the public schools from the kindergarten to the junior college, 59 per cent of the number complete the elementary grades and receive certificates while nineteen per cent of all pupils complete the high school and receive diplomas of graduation. Of all the pupils who enter the public school system, three of every five persist until the elementary course is finished and one of every five until the high school is completed. While this condition indicates that much is yet to be accomplished, it shows that the public schools have gone far in



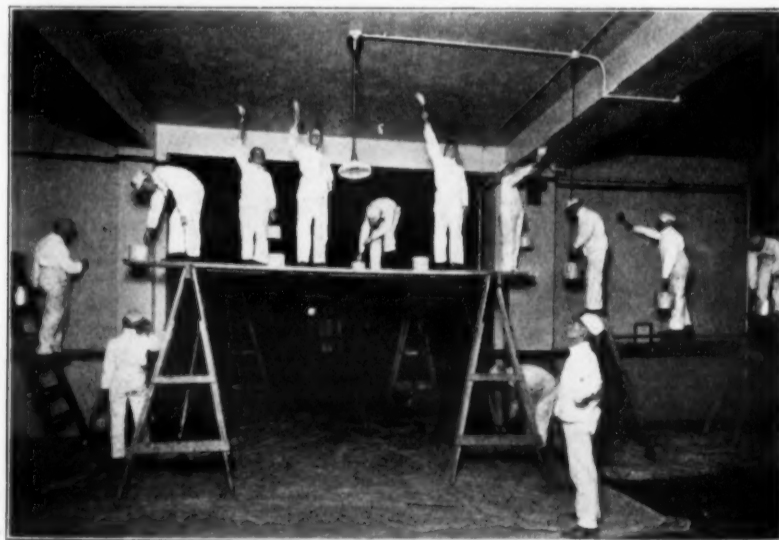
Lunch Room, Humboldt Elementary School.



Garden, Ashland Elementary School.



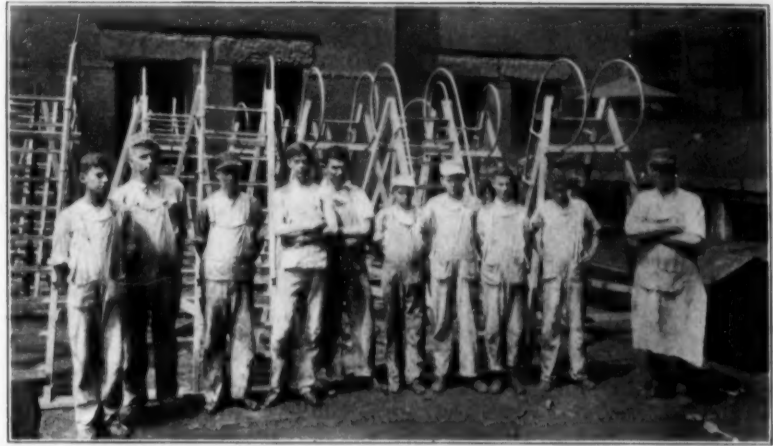
Machine Shop, Foundry and Forge Shop Classes. The Vacation Shop School for the Summer of 1916 utilized the construction of 8 woodworking lathes, 50 woodworking vises and a large amount of playground apparatus as material for instruction.



Lathrop School of Mechanical Trades, Class in Painting, Franklin School.



Cottages Nos. 1, 2 and 3, McCune Parental Home. Nos. 2 and 3 have been constructed by the boys in the Vocational Classes.



Class in Carpentry, in the Vacation Shop School, Summer 1916, Polytechnic Institute Building, engaged in constructing playground apparatus.

affording the masses the rudiments of an elementary education.

Kansas City is unfortunate in one respect in that it has no great educational institution of college or university rank located within its limits. The thousands of boys and girls who have completed the high schools and have desired further education have been compelled to go elsewhere to obtain it. This condition induced the board of education one year ago last September to establish as part of the public schools of Kansas City, a junior college. In the establishment of this extension to our system we were greatly aided by the University of Missouri who favored public high schools in cities of this class undertaking the first two years of college work. We were surprised that more than two hundred and fifty entered the first year. A sufficient number of students living in the city who had spent one year in college elsewhere entered to give us a graduating class the first year. At present there are more than four hundred students in the junior college.

At the present time, under the jurisdiction of the board of education there are a junior college, teacher training school, six high schools, and 81 elementary schools of the regular type. Four of the high schools are of the type known as cosmopolitan. The number of students is such that it is possible to maintain classes in all subjects usually presented in schools of this class. One high school, the manual training, emphasizes that feature of secondary education, while the Polytechnic Institute, in addition to housing the junior college and teacher training school, has a six years' mechanic arts course and a four year course in business training.

Practically every elementary school in the city is equipped with kindergarten, manual training, and domestic science. It is the endeavor of the board of directors to furnish to all residents of the city every phase of elementary education that is now being given in public schools.

In addition to the regular schools above mentioned, special schools are in operation for the deaf, for anemic children in open air rooms, for the sub-normals and for the morally delinquent. Special provision has been made for the "problem" boy. The county has provided a home containing more than one hundred acres where the boys who can not be reached in the regular schools are given homes and educated. The school district has assumed the educational management of this institution known as the McCune Parental Home. Instruction covers all lines of academic work and includes as well training in such activities as can be adapted to farm life. In addition there have been organized classes in the building trades and the boys of the home who are from 10 to 16 years of age have constructed, complete, ready for use, two

cottages, each capable of housing from twenty to thirty boys. It is designed in these cottages to duplicate home life getting away as far as possible from institutional life. In all there are eight complete cottages each furnishing a home for 25 boys. The boys have also installed an electric light plant, doing all forms of construction work, and in the carpenter and cabinet shops they have constructed the furniture necessary for the proper equipment of these cottages. In such high esteem is this home held that boys who fall into the hands of the juvenile court and are sent to this institution are considered fortunate as conditions afford them many more opportunities than they would possess by remaining in their homes and attending the public schools of the city.

The limits of McCune Farm are such that not more than two hundred boys can be accommodated. There seemed to be needed in addition, an institution that would take care of boys who did not respond to the instruction given in regular classes but still should not be taken from their homes and removed from parental influence. For this class of boys there has been established a "problem school" known as the Broadway School for Boys. This school was organized last September and contains at present about fifty students. The instruction is intended to be such as to reach the peculiar tastes and dispositions and inclinations of the boys who could not be handled in the regular daily classes. Much handwork and playground work are given.

Buildings.

In addition to the moneys received from the state, the schools are supported by an annual levy limited by the state constitution to six mills on the dollar of the assessed valuation.



MR. I. I. CAMMACK,
Supt. of City Schools, Kansas City, Mo.

In Kansas City, as in many growing cities, the assessed valuation of the property has not kept pace with the increase in population. The rate which may be assessed under the constitution has been found to be insufficient to meet the needs of the district. It does not provide revenue for keeping up the school plant or for maintaining the current expenses of the schools. To provide adequate funds, the district during the past thirty years at each biennial election or by special election, has been voting, first, an increase in the tax levy of from two to four mills on the dollar of the assessed valuation; and second, such bond issues as have been found necessary to provide adequate school buildings.

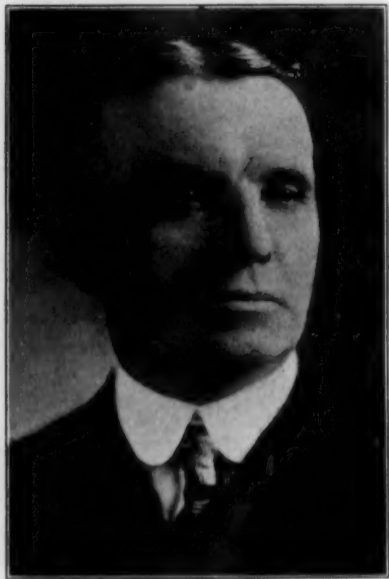
So many additional activities have been demanded of our schools during the past decade, that the type of building constructed for school purposes a generation ago was no longer satisfactory. To meet the demands for additional buildings and for buildings to meet the additional functions performed by the public schools, the district during the past four years has voted \$4,000,000 in bonds. Out of the funds derived from the sale of these securities, there have been erected two new high school buildings which with their equipment have cost more than \$600,000 each; eleven new elementary buildings ranging in cost from \$85,000 to \$225,000, and fourteen additions to buildings already in existence. In addition to the above, school sites in many parts of the city have been enlarged and improved. The new buildings and additions that have been erected during this period have been designed to fulfill the largest possible purposes of public education. They have been of fireproof construction and provided with the most modern appliances for ventilation and heating. They have contained shops for teaching manual training and vocational subjects, rooms for household economics, gymnasiums with shower baths, play rooms, provisions for open air rooms for anemic children, many of them rooms for giving school lunches, ample hallways, auditoriums or assembly halls suitable not only for school but for community meetings. The sites on which these buildings are placed have been sufficiently large for ample playgrounds and for demonstration gardens. They also contain a house for the residence of the custodian. These buildings, wherever possible, have been placed in the best location that the neighborhood has afforded instead of being placed on undesirable hillsides or in ravines or on property of low commercial value.

While the old type of buildings could be constructed at from \$4,000 to \$5,000 per classroom, the buildings now being erected have cost from \$9,000 to \$11,000 per classroom, the increased cost resulting from the different character of the construction, the additional sites on which they stand, and the fact that gymnasiums, assembly halls, play rooms, etc., are not counted as class-

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THE KANSAS CITY MEETING

By President John D. Shoop, Chicago



PRESIDENT SHOOP

At the meeting of the Department of Superintendence of the National Education Association scheduled for February 26th to March 3rd, 1917, there will be assembled educators of high rank from every part of the United States. The attendance in Detroit last year reached 5,000.

The subjects under consideration for the current year are those concerning which the public at large have a deep interest. Boards of Education all over the country should take special measures,

if necessary, to see that their administrative and supervisory officers are in attendance at this meeting. They will bring home not only a fund of information bearing upon the vital educational questions of the day, but the opportunity will afford also means for inspiration unequalled by any other assembly of like character that is known in our country. An investment by school authorities to the amount of the expenses necessary for making this journey will yield manifold returns.

DEPARTMENT OF SUPERINTENDENCE
AT KANSAS CITY.

Program of the Meetings.

The Department of Superintendence of the National Education Association which will be held at Kansas City, February 26 to March 3, promises to exceed in attendance and interest the largest previous meeting of that body. In connection with the general sessions there will be meetings of the National Council of Education and of twenty minor organizations of allied educational interests.

The program which is reproduced below, contains an outline of the more important topics which are to be discussed and which were available at the time of going to press. It has been impossible to obtain, at the present writing, the sectional programs which are to take place on Thursday afternoon.

The convention will be accommodated in the Kansas City Convention Hall and the commercial exhibits and registration will be centered there. The convention headquarters will be located in the Hotels Baltimore and Muehlebach, and the minor meetings will be conducted in these hotels and in neighboring halls and churches.

The local arrangements which are under the general direction of Supt. I. I. Cammack have been completed in such a manner that every superintendent will be assured of ample hotel accommodations and of such other conveniences as he may desire. Applications for rooms should be made to Mr. Otto F. Dubach, Care of Superintendent of Schools, Kansas City, Mo.

Railway Rates.

The various passenger associations have taken the following action in connection with the open round-trip rate for the meeting. In the Western Passenger Association, the Central Passenger Association and the Trunk Line Passenger Association, tickets will be on sale from February 24-26, with return privileges to reach the original starting point not later than March 7th. The New England Passenger Association has agreed to the open rate but has not fixed the dates of sale or the final return limits. Most of the New England superintendents will come to the convention in the Holden Special which will leave Boston at 9 A. M. February 24. The Trans-Continental Passenger Association has offered its regular low rate tourist ticket for persons from the Western Coast and most of the roads in the South Passenger Association have agreed to an open round-trip rate.

AUXILIARY ORGANIZATIONS.

The National Council of Education will hold three meetings. The first session on Monday will take up a program for the council of Control of Education Thru Legislation and Control of Educational Progress Thru School Administration. On Tuesday the general topic of Educational Control will be continued by discussing supervised educational experimentation, professional preparation and professional organization. On Tuesday afternoon the Joint Committee on Health of the American Medical Association and the National Council will present a report.

The conference of normal schools will be divided into state normal and city normal groups and will discuss largely efficiency measures.

The National Society for the Study of Education will hold two conferences on Economy of Time and Minimum Essentials in Elementary School Subjects.

The Association of Principals of Secondary Schools will take up Problems of High School Management and Organization.

The Association of High School Supervisors will discuss Methods of State Conference, State Visitation and State Aid.

The American Home Economics Association will discuss Problems of Administration, School Luncheons, the Relation of High School Courses in Economics to Other Subjects, etc.

The Preliminary Program.

Tuesday, February 27, 8:00 p. m.

Address of Welcome—Governor of Missouri, Mayor of Kansas City, and Supt. I. I. Cammack of the City Schools.

Response—Dr. O. T. Corson, Editor Ohio School Journal, Columbus, O.

Address—Former United States Senator Albert Beveridge, Indianapolis, Ind.

Wednesday, February 28, 9:30 a. m.

Topic—A Stronger Foundation for and a Better Command of Spoken and Written English.

(a) In the Elementary Schools—Supt. M. C. Potter, Milwaukee, Wis.

(b) In the High Schools—Principal Jesse Newton, High School, Lincoln, Neb.

(c) In the Normal Schools—Mr. James Hostie, Teachers College, Columbia University, New York.

(d) In the Colleges—Prof. E. M. Hopkins, University of Kansas, Lawrence, Kans.

Importance of Effective English in Public Service, Supt. Hugh S. Magill, Springfield, Ill.

Greetings from the National Education Association, Pres. Robert J. Aley, University of Maine, Orono, Me.

Wednesday, February 28, 8:00 p. m.

Topic—Uniform Standards and Correlative Factors in Public School Education.

(a) Standards of School Architecture and Schoolhouse Construction—State Supt. F. L. Keeler, Lansing, Mich.

(b) Standards of Individual Health Among Children—Dr. John Dill Robertson, Commissioner of Public Health, Chicago, Ill.

Standardized Units of Achievement of Pupils and Measurable Standards of School Administration—Dr. Charles H. Judd, University of Chicago.

Thursday, March 1, 9:30 a. m.

Topic—Defining the Scope of Education.

(a) The Legitimate Range of Activity of the Junior College from the Viewpoint of Public Administration—Supt. I. I. Cammack, Kansas City, Mo.

(b) Relations Between and Differentia Defining the Work of Public School Education and Philanthropy—Supt. J. H. Francis, Columbus, O.

(c) Relations and Lines of Demarcation Between the Fields of Industry and Public School Education—Supt. Albert Shiels, Los Angeles, Cal.

(d) Multiple Use of Child Welfare Agencies—Supt. William Wirt, Gary, Ind.

(e) Vocational Guidance Based Upon Predetermined Mental Aptitude—Dr. David Spence Hill, Former Director of Educational Research, New Orleans, La.

(f) Report of Committee on Relation Between Boards of Education and Superintendents—Supt. Charles E. Chadsey, Detroit, Mich.

Round Table Conferences.

Thursday, March 1, 2:00 p. m.

(a) State and County Superintendents—State Supt. Nathan C. Schaeffer, Harrisburg, Pa., Chairman.

(b) Superintendents of Cities with a Population over 250,000—Supt. Wm. M. Davidson, Pittsburgh, Pa., Chairman.

(c) Superintendents of Cities with Population Between 25,000 and 250,000—Supt. E. U. Graff, Omaha, Neb., Chairman.

(d) Superintendents of Cities with a Population Under 25,000—Supt. Frank I. Vasey, Charles City, Ia., Chairman.

(e) Round Table of Directors of Educational Research—Walter L. Munroe, State Normal School, Emporia, Kans., Chairman.

(f) Round Table of Compulsory Education, School Census and Child Welfare—Supt. J. M. Gwinn, New Orleans, La., Chairman.

Thursday, March 1, 8:00 p. m.

Observable Tendencies Toward a Nationalization of American Education.

(a) Its Spirit, Purpose and Method—Hon. P. P. Claxton, U. S. Commissioner of Education, Washington, D. C.

(b) Its Legitimate Scope and How It Might Be Made to Articulate with State and Local Initiative—State Supt. Francis G. Blair, Springfield, Ill.

(c) Address—John H. Finley, Commissioner of Education, Albany, N. Y.

Friday, March 2, 9:30 a. m.

Educational Poise: Variations in the Ratio of Time to be Given to the Mental and Manual Elements in the Different Grades of Elementary Schools and Their Relative Values in Educational Symmetry.

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The Functions and Relations of Rural Supervisors

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These are days of great and significant changes in almost every phase of our National civilization. Political governments are being overthrown, united with one another, and reformed, sweeping re-adjustments are taking place in the economic world, our very social fabric is feeling the strain, and last but not least the educational systems of the various nations are undergoing the most searching investigation ever recorded.

It might be said further, that no phase of American education is receiving quite so much attention of late as that of the rural schools. It shall be the purpose of this article, therefore, to discuss in a semi-popular fashion the *Functions of the Rural School Supervisor, as related to the State, the Superintendent, the School Board, the Teachers and the Patrons.*

Functions and Relations of the Supervisor.

Having thus a glimpse of the changing ideas of rural education and some of the principles which account for the same, let us now consider the *relations and functions* of the rural supervisor.

It may be necessary in the very beginning of our discussion to point out the fact that in only a few states, as yet, is there any statutory provision for districting the schools. West Virginia enacted such a law in 1907, in which state the school district coincides with the magisterial district. Notwithstanding the law is only permissible, yet in 1912-13 there were as many as sixty district superintendents in 27 counties. In these districts one result of supervision was to increase the percentage of attendance from 68.7 per cent to 85.8 per cent.

The Oregon law which went into effect in 1911 provides that each county with over sixty schools shall district them, with not less than twenty nor more than fifty schools in each district.

Pennsylvania enacted a law in 1911 which provides for an assistant to the county superintendent, when there are over two hundred schools in a county, and an additional assistant for each additional two hundred schools in the county.

North Dakota authorizes assistant county superintendents when there are over fifty schools in the county, and Maryland has a similar enactment.

Many states, as Illinois, for example, have had such school officers for many years while other states, as Kentucky for example, have provided for county supervision only recently, and still others, as the New England states, for example, have never had county superintendents.

There are three plans of school organization in vogue thruout the United States, viz.: Town, county and district. Maine, Massachusetts, New Jersey and Pennsylvania are examples of the town, or township plan. Kentucky, Tennessee, Florida, Louisiana, North Carolina, Georgia, Alabama, North Dakota and Ohio have the county plan, while the balance of the states have the district plan; except Iowa, Utah and South Carolina, all three of which have a mixed plan.

Even yet in most states the county superintendent is elected by the people, which means that the office is still on a political basis. In a few states, as Indiana, New York and Pennsylvania, the county superintendent is elected by the trustees, while in some other states, as Tennessee, North Carolina, Virginia, New Jersey and Ohio, he is appointed by a board, thus representing a change from the political to the professional basis, such as should be, and no doubt will be, the case in every state.

But no county superintendent has ever been able to approximate the work of real supervision, since practically four-fifths of his time is taken up with office work. In most cases no provision is made for an assistant supervisor, and indeed in many cases not even as much as one office helper.

Much less could a state superintendent undertake anything in the way of scientific supervision, except of course as an organizer and director, so in our discussion of the *functions and relations* of the rural supervisor, it should be understood that we refer to those who are in position to undertake the real supervision of the schools from the standpoint of classroom work, as well as from the standpoint of the material needs of the school such as adequate school plants, together with ample support for same. Such supervision is possible only in those states which have provided for assistant county supervision, or for township or district supervision, and in those states which have permitted the consolidation of rural schools and the erection of township high schools.

From this viewpoint then, we propose to discuss in a suggestive way, the *Functions and Relations* of the supervisor:

(1) To the State.

The rural school supervisor may be considered as a traveling representative of the state, for, if we are ever to have a system of education that is economic in its management and effective in its administration, the program must be propagated thru a highly centralized organization such as that outlined by Prof. Cubberley for the hypothetical state of Osceola.

In an ideal state school system, the commissioner of education would have authority to direct the educational policy of all the public elementary and high schools of the state. This could best be done thru a number of department heads, one of which would be that of *Rural Schools*. The head of the state department of rural schools would communicate the plan of the commissioner to the county superintendents, who in turn would work out the plan thru the assistant county superintendents, or district or village supervisors, with such adaptations as may seem wise for each particular county.

In the conglomeration of state school systems which we have at present thruout the United States there are found all sorts of conditions from the "near ideal" systems like those of Massachusetts, New York, Idaho, and Vermont, down to a condition in which the state and county superintendents are nominal political figure heads, with little uniformity in the work of the schools in any given county, to say nothing of the lack of it thruout the state. The unequal distribution of school funds due to the small unit system of organization, the in-breeding of teachers in the rural communities due to personal politics, the waste of time and materials due to a lack of proper supervision, the grievous blunders in the planning and erection of school buildings are all common occurrences in sections of the country where the once famous, but now infamous conservatism of the local school boards prevents the onward march of school progress.

But the majority of school officers and teachers find themselves in very much the same situation as that of a family far removed from medical help in time of sickness. The big question in both cases is "what to do till the doctor comes." Instead of folding the hands and sitting down to await a change of legislation, or on the other hand being too conservative to start any work of improvement for fear the change

might come and the work would thus be lost, every school superintendent, supervisor, or principal should at once carefully canvass his field to see what might be done, while awaiting the greater improvements which can only be brought about by a radical and sweeping change in the organization and administration of the schools.

One of the purposes in view in outlining our discussion was to offer, if possible, a few helpful suggestions on "What to do till the change comes."

A careful study of the published reports of educational progress thruout the states indicates that some splendid work is being accomplished even in states where the desired changes in legislation have not yet been realized. For example, in 1911, the rural supervisors from ten states met at Jacksonville, Fla., effected an organization, worked out a plan of co-operation with a program. A rural school survey was authorized and the following constructive plans were laid. (1) A content is needed, based upon thoro experimentation and demonstration. (2) Consolidation is needed. (3) Expert supervision and (4) A new system of taxation. At their conference, held in Louisville, Ky., in April, 1914, this same organization endorsed the consolidated school as "one of the greatest single factors in rural school improvement."

In his 1911 report, the United States Commissioner of Education says that the new movement in rural education has spread to the whole world. In the report of the following year he says, while there may be too much supervision in some cities still there is too little in the rural districts. At the meeting of the National Education Association in the same year (1912), a committee of eleven was appointed to investigate rural education. In the same year South Carolina granted state aid to rural schools. The state of Virginia which had previously set aside \$25,000 for two years, now increased the sum to \$75,000. The 1913 report shows that as many as 24 states have state rural supervisors and some have two or more of these officers.

To be a little more specific, the state supervisor of rural schools in Illinois a few years ago inaugurated a state-wide plan for the improvement of rural schools, which consisted in recognizing as "Standard" or "Superior" those schools which measured up to certain requirements deemed necessary for effective school work. In this way as many as thirteen hundred rural schools were brought up to the "standard" in three years.

The state of Illinois may be as far from adopting a plan of school organization like that which Vermont has recently enacted as any rural family is far removed from a doctor, but evidently the state office believes in "doing something while the doctor is coming."

(2) To the Superintendent.

The rural supervisor is the assistant to the county superintendent whether he is so designated or not.

Mr. J. W. Zeller, who was superintendent of schools, of the state of Ohio, at the time of the recent revision of the school code, says, "The district superintendent is recommended and nominated for his position by the county superintendent and does his work under the direction and guidance of the county superintendent, to whom he is required to report monthly as to the nature of his work and the condition of his schools. The relationship is vital and should be confidential, frank and sympathetic."

In states which have enacted mandatory laws regarding the districting of schools, as Oregon for example, and in states which have provided

for assistants to the county superintendent for each fifty schools in the county, as North Dakota for example, or where there is a provision for township supervision, as is the case in New Jersey, the rural supervisors are in position to show what they can do. There is, therefore, no excuse to offer for these men if they are not accomplishing things worth while. If ample provisions have not already been made in the way of state and county-wide equalization of taxes, the supervisors can in most cases still resort to the method of inspiration and persuasion, bringing about the consolidation of rural schools.

According to the federal commissioner's report for 1914 as many as eighteen states now have more or less of the county system of organization and still others have the county unit of taxation. While there is more or less of consolidation going on thruout the country, and while the consolidated rural school is no longer considered an experiment, yet special activity along this line was reported in Alabama, Indiana, Louisiana, Minnesota, North Dakota and Ohio.

Here, then, is something the supervisor can do without any danger of making a mistake, provided he is a man who has a grasp of the social significance of the movements that are on and is capable of exercising good business judgment.

Few of the patrons and members of the school boards realize the fact that the rural schools are rapidly being depleted of their once large enrollment of pupils.

In the commissioner's report for 1914 it is pointed out that in the state of New York alone, 8,430 of the 11,642 elementary schools are one-room schools, and of these 3,580 have an average attendance of ten or less, while in Colorado there are 1,725 "third class" rural schools, 281 of which have fewer than fifteen pupils in attendance.

Even where it is not possible, or may not seem wise, to urge consolidation, still there is plenty of room for improvement. One supervisor in Oregon accomplished during a single year no less than twenty different items of improvement, affecting many schools in his district, such as, enforcing the state course of study, providing pure drinking water, more sanitary surroundings, better equipment, play apparatus, etc.

A whole county in Ohio adopted uniform textbooks, the exchange price being paid by the school boards, and replaced all the old brooms and dusters with modern floor brushes and sanitary dust cloths. This was carried out by the supervisors under the direction of the county superintendent.

(3) To the School Board.

The rural supervisor is legally the employee of the county board, if he is an assistant to the county superintendent, or of the district board, if he be a district superintendent, or of the township board, if he be a township supervisor, and of the state board direct, if he be connected with the state department.

The school board is the legislative body while the supervisor is the executive officer of all the boards in his supervisory district. It is his duty to be present at all the board meetings to advise and confer with them on all matters pertaining to the improvement of the schools under their charge.

In his relation to the board the function of the supervisor is to be exercised chiefly in connection with the material equipment and support of the schools.

As Professor Cubberley has well said: "No amount of mere preaching to rural school teachers will make the county schools sufficiently better. The situation requires economic advan-

tages and social pressure to produce results. Our experience shows that country life and institutions have been modified by far reaching conditions—economic, social, political, legislative and administrative—they must be re-created by the same large forces." Now, a part of this re-creation referred to in the above quotation is within the jurisdiction of the school board, but inasmuch as the school boards of today are becoming more and more willing to follow capable leadership in all matters pertaining to the welfare of the schools, it falls to the school supervisor to bring before the boards such information as will enable them to see what is being done elsewhere and what things are possible to be done in their respective localities.

For example, one county supervisor in Washington state made a complete survey of the resources of his entire county, which revealed to the various school boards the fact that the rural schools of that county could, with the same rate of taxation, have just as finely equipped school plants as any of the city schools, provided the rural schools were properly grouped in districts. The argument was convincing and that county today boasts of some of the most up-to-date schools that are to be found anywhere. One of the best ward principals in the city of Tacoma was taken out to become the supervisor of one of the large consolidated districts at an increase of some \$600 per year in salary. One small village and surrounding territory erected a \$15,000 gymnasium, and later on a \$75,000 high school building.

The above results were achieved chiefly thru the equalization of taxes brought about by consolidation. Similar instances might be cited showing the advantages of adopting the county unit of taxation as well as of supervision. For instance, one township in Allen County, Ohio, in which is located a large oil refinery and thru which runs a railroad or two, has a tax levy of only .6 of a mill, while in the same county another township is paying ten times as much, or six mills.

One of the best kinds of service which a rural supervisor could render to the various communities over which he presides would be to arrange a visiting tour for members of his school boards, and go with them to observe how these advanced plans of school organization and administration are being worked out in other sections of the state. If his own section is already well to the front in this respect, then let him arrange for a big convention at some suitable place within his district, to which all the school boards of the surrounding districts or counties would be invited to send representatives. The general value



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of the convention system for the disseminating of information and for the arousing of interest is recognized in all the professions, trades and commercial enterprises of the present time. Certainly it would not be amiss, then, to carry this plan down to include township, district, and county school boards. Indeed, it is the judgment of the writer that the effective leadership of the supervisor would be increased perhaps by 25 per cent if he would spend half as much time in "leading out" (educating) his school boards as he is spending in "leading out" (confusing?) his teachers.

For the best success in his work the supervisor should be given a guaranteed term of office of not less than three years, and better still five or six years, in order that he may properly survey his field, lay plans and carry out the same. The school would do well to pattern after some of the churches, which appoint district superintendents for one year, but with the customary practice of reappointment for each of the next succeeding five years, making in reality a term of six years, thus giving the superintendent ample time and opportunity to become thoroughly familiar with not only the men under his supervision but also the entire constituency of his district.

Then, the number of teachers assigned to each supervisor should be limited say, not to exceed fifty or sixty. Mr. Jas. C. Miller, who has studied the rural school problems of Canada says that most gratifying results have been obtained thru the work of the rural school inspectors, but remarks, that a much greater improvement could be achieved if the number of teachers under each supervisor were reduced to from fifty to seventy-five teachers per inspector, provided always the inspector was fully cognizant of all the needs of the situation and capable and qualified to meet them in a tactful, helpful and resourceful way. What a challenge this is to the powers that be in school organization and to the schoolmen in supervisory positions!

(4) To the Teachers.

Former superintendent Zeller, whom we quoted in a previous paragraph, considers the relation of the supervisor to the teachers as most vital. "He selects his teachers and is to guide, instruct and inspire them in their classroom work. The supreme purpose of his supervision is to make his teachers more efficient in their daily work, more efficient in the best methods of instruction, in a more efficient and economic management, and in the creation of a proper school spirit. To this end the law (Ohio Statute) directs that he shall give three-fourths of his time to the regular schoolroom work of his teachers."

It is a self-evident fact to anyone who has made a first hand observational study of the situation, that the limitations of the rural schools in respect to amount of work offered, equipment, scope, financial support, etc., offer a splendid opportunity for the district supervisor to serve the community. And because there is so much to be done in these respects we doubt very much the wisdom of requiring the supervisor to spend so much of his time with the teachers.

There is a great deal, however, that the supervisor can and should do to assist his teachers directly in their classroom work. For example, the supervisor is properly speaking a "demonstrator" employed by the school board to inspire the teachers by his superior ability as a classroom instructor.

The supervisor who has the happy faculty of making his speech to the teacher and her pupils in the form of a "demonstration" lesson, may well compliment himself, it is true, but even then it would be better for him to demonstrate the "hitching up" process, for it is just here that the young teacher most needs instruction and help. Too many teachers know how to pull the

wagon, alas, their pulling out of school the pro-

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wagon, so to speak, by this method or that, but alas, they do not know how to "hitch up" to their pupils. Just as many schoolmen are starting out to revise or reform some part of the school system before having "caught up" with the profession themselves.

It is as tho one should endeavor to direct, or in any way attempt to improve, say, a great parade of nations by breaking in away down the line of procession. A supervisor was observed recently who was practically hindering the progress of his teachers by over-burdening them with oral and printed instructions, to say nothing of the numerous unnecessary "reports" and "records" that were required.

One of the things most needed on the part of inexperienced supervisors is to cultivate a high degree of professional regard for the position of his teachers touching all classroom work, lest his frequent visits leave the impression in the minds of the pupils that he looks upon the teacher as occupying the position of a pupil under him.

In their discussion of the teacher as a citizen-maker Eggleston and Bruère cite numerous instances to show that it is not the one-room school so much as the one-room teacher that fails to improve the community.

It is, therefore, the function of the supervisor to help make successful teachers out of the would-be failures. A district supervisor in northwest Ohio developed a failing teacher into a most successful one by taking her to observe the work of one of the better teachers in his district. He accomplished more in this way than could have been accomplished in twice the amount of time, spent in preaching to her about her failures.

In his chapter on Better Supervision of Rural Schools, Professor Cubberley says, "It should be the particular business of the supervisors to try to make good teachers out of the material at hand; to single out promising ones, and to promote them and encourage them to advance in knowledge and training; to guide the schools in organization and management, and to develop the educational system of the country as fast as the people can afford, and as fast as is consistent with sound education. From time to time conferences with teachers should be held as to methods and results. For this work, men and women are needed who possess generous personal culture, liberal views, good pedagogical training, satisfactory teaching experience, good common sense, and a knowledge of and sympathy for rural conditions, people and life."

(5) To the Patrons.

The supervisor is indirectly the employe of the people thru their representatives on the school board, and is directly their servant thru his work in directing the education of their children. He is the educational expert and representative of the community, hence is expected to stand abreast of the times in all matters of educational improvement.

In "Chapters in Rural Progress" President Butterfield says, "The supervisor of rural schools should be acquainted with the material resources of his district. He should know not only what constitutes good farming, but the prevailing industry of the region should be so familiar to him that he can converse intelligently with the inhabitants, and convince them that he knows something besides books. The object is not alone to gain influence over them, but to bring the school into touch with the home life of the community about. It is not to invite the farmers to the school, but to take the school to the farm, and to show the pupils that here before their very eyes are the foundations upon which have been built the great natural sciences."

Dr. Betts says, "The problem of any type of school is to serve its constituency." Now, if the supervisor is to direct the forces of the school in serving the community, obviously his first and most fundamental task is to ascertain what the needs of the community are. We should say the best way to attack this problem would be to institute a systematic and thorough survey of the whole district. If possible, this should be done in co-operation with some organization in the community, as a commercial club in the larger towns. What is most needed is a supervisor who has the ability and training to enable him to properly *diagnose* the situation. Under the old system of school work the custom was to *diagnose a little* and *prescribe much*. Now the plan is, to *diagnose much* and *prescribe a little*. At any rate, no schoolman should presume to offer an educational prescription for the community unless it is based upon reliable information obtained in a scientific way.

Let no one think that this is an easy job and that anyone who has had a few years of experience in teaching can fill the position of supervisor. As has been well said, "The rural schools constitute the most *important* and *puzzling* educational problem of the present day." Therefore let no supervisor be deluded into thinking that he is "solving" the rural school problem when he has shown a little improvement in a

few minor respects, as for example, changing the seating arrangement, substituting all-felt erasers for wooden-back ones, set up a basketball apparatus on the playground, etc., nor yet, when he has succeeded in some of the larger and more important respects, for as Professor Betts says, "The well-meant attempts to 'improve' the rural school as now organized are futile. The proposal to solve the problem by raising the standard for teachers, desirable as this is; by the raising of salaries; or by bettering the type of the little schoolhouse, are at best but temporary (what to do till the doctor comes) make-shifts and do not touch the root of the problem." The real function of the supervisor as related to the patrons is to lead them to a realization of the broader needs of the school, which can perhaps best be started by showing them "what to do till the doctor comes."

Many of the broader needs of the rural community have been discovered thru such investigations as that carried out by the United States Commission on Country Life some years ago, and reported by Prof. L. H. Bailey in 1911. The commission held hearings at a large number of centers thruout all sections of the country and reported the most prominent deficiencies to be such as (1) lack of knowledge on the part of the farmers of exact agricultural condi-

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Needed Changes in the Present Method of Conducting the Business of the Board of Education and Reasons Therefor

Suggested by the President of a City Board of Education in New Jersey, who is also chief executive officer of a large business corporation in New York City.

1. Eliminate standing committees. A city looks to the Board of nine members to manage its schools. With standing committees the Board breaks itself up into several smaller boards, loses some of that unity of understanding on the part of the whole body which is so essential, scatters its energies and wastes its time.
2. Systematize its business and give to its executive staff full responsibility for executive detail, and devote itself only to oversight and direction of all that is done.
3. Make the Superintendent the Executive Officer, give him full powers and responsibilities, and hold him strictly accountable for the successful conduct of all departments of the system.
4. Appoint the Superintendent for a three-years' term.
5. With the superintendent's aid define the functions of every member of the educational service.

The board should say to the superintendent:

"Everything to be done here is for one end, the education of the child. Everything you recommend we are going to ask you to justify in one way only—by showing that it is necessary to the running of a good school system. You are the expert whom we have put in charge of it, and we are going to see that you do your work and you are to keep us fully informed and at all times convinced that the work is being done as we wish it done—in as complete and effective manner as funds permit.

"If you recommend new things, you must convince us that they are necessary. You will be held strictly accountable for every expenditure. We shall watch the results which you get with the utmost care."

6. The superintendent shall plan a policy of development, and submit the same in great detail; the same to include a report on the school system as it is, with recommendations as to what it should be. The board should study the report with great care and decide either for or

against the policy laid down.

This procedure should be repeated at frequent intervals.

7. The superintendent, as an expert in education, should convince the board by frequent reports thereon, that the schools are continually progressing in two respects particularly—in the efficiency of teachers and in the character of the training given to the children. The superintendent's business is to secure this progress; the board's duty is to see that he secures it and to give him ample powers with which to produce it.

8. If the board makes its executive officers take full responsibility for the proper workings of the school system, one regular meeting a month of the board will be ample to transact all its business.

9. Adjourned and special meetings may be called when needed.

10. Special committees will be appointed to investigate and report in writing to the Board on matters that require very special attention.

The Proper Functions of a Board of Education.

Members of a board of education are directors of a large corporation and should apply the principles of good corporation management to educational affairs. Their executive officers should have authority and be held accountable for the work.

A board should supply funds, supervise expenditures and determine the policy and future extension of the school system.

Its duty is to see that the schools are properly managed, and not to manage them itself.

It is not appointed to build buildings; but to see that they are built.

It is not appointed to supervise teachers; but to see that they are supervised.

In short, it is appointed, not to do the work itself, but to get it done.

As running a school system is an expert business, directed to one end, the education of children, it should be managed by an expert manager and that manager must be an educator.

Standards for Judging Textbooks in Arithmetic

Supt. L. L. Forsythe, Ionia, Mich.

A poet-laureate of England once said, "Give me the making of the Nation's songs and I care not who makes its laws." With equal truth an idealist in education might say, "Give me the making of the nation's textbooks and I care not who writes the books on pedagogical methods." True it is that with our schools organized as they are, with our teachers so little trained as they are, and with the traditions of the past so largely determining the procedure of the present, the textbook is a vital determining factor in most of the courses offered in our elementary and secondary schools. The choice of textbooks therefore is a problem to which a painstaking superintendent should bring no less skill and analytical acumen than to the choice of his subordinate supervisors and teachers.

Yet how often is the choice of a textbook dependent on a mere personal whim as to a minor point, the personality of the agent, a desire to even things up with various book concerns, or a vote of teachers or principals, which passes up responsibility but does not insure an expert opinion founded on carefully thought out principles of pedagogy? Too often the superintendent sits down with a stack of books to be considered, thumbs them thru hastily, perhaps reading a page here and there, and so rejects those which do not happen to suit his fancy when considered as to binding, typography, number of pages and other minor details. When his choice has been reduced to two or three books by this highly expert method, he resolves to look them over more carefully at some near-future date and then turns to some urgent detail of administration. Before that expected day arrives, the agent of one of the selected books appears and the superintendent is persuaded that his is the best of the books and a promise is given that it will be recommended to the board of education at the next meeting of that body. The superintendent does not feel that he has been careless or inexperienced; he is probably convinced that he has made an excellent choice, especially in view of the fact that more schools are using that book (so the agent said) than all other competing books combined. The book is adopted and put into use only to find that it is little, if at all, superior to the book displaced. So the merry dance goes on year after year. In few cases are textbooks chosen with definite standards in mind for determining their value. Indeed few superintendents have any adequate system of procedure whereby they can be sure of selecting from a field of textbooks the one which most nearly conforms to their individual notions in any particular subject.

The writer of this article was facing the selection of arithmetics for the ensuing year when he became a student in the Summer Session of Teachers College, Columbia University in 1915. When called upon to make a special study of some problem as a part of his work in connection with one of his courses, he confided this situation to his instructor. The latter suggested a formulation of standards for judging textbooks in arithmetic and the application of these standards to the leading texts. He found others who had been assigned to the same or similar problems and worked with these men in the formulation of standards to which textbooks in general should conform but largely by himself in the proposal of the following standards for arithmetic. He here presents the standards for judging textbooks in arithmetic in the hope that they may clear the atmosphere for others as they did for him. He does not dare to hope that all will agree with him in the statements

made below as to what a textbook in arithmetic should embody, but he does believe that these statements deal with the essential features to be considered in a series of arithmetics and that anyone can recast the standards to meet his own ideals. He will be content if they help others to approach the problem of judging arithmetics in a more rational manner than is usually followed:

General Statement.

Textbooks in arithmetic should be judged with reference to the provision which they make for relating the child to the more important quantitative aspects of his life in society.

Specific Standards.

1. Each new phase in arithmetic should be developed as growing out of the interests, experience and needs of the child. The new phase of the subject will thus present itself as a problem or project of interest and value to him and will engage his efforts to master it.
2. Provision should be made for the economical mastery of fundamental facts and processes. To this end the exercise of skill in the motivating of drill work and reviews should be demanded. An author who merely provides a series of exercises has met only the easier demands of his task.
3. Provision should be made for the development of good judgment and clear reasoning power by the solution of problems which will appeal to the child as of value. The following sorts of problems should be considered here: (These classes are not to be considered mutually exclusive.)
 - a. Problems of the home, playground, school, and social life.
 - b. Problems growing out of dramatized life situations.
 - c. Problems in which the child has to make a choice from among data not all of which are involved in the solution. This is usually the

way in which problems are presented in real life.

d. Problems in estimating heights, distances, weights, capacity, etc.

e. Problems in which results are to be approximated, mainly as a check on accurate solutions to follow.

f. Problems which are grouped about a single situation.

g. Problems in which numbers are not involved.

h. Problems with simple numbers which may be solved without the use of a pencil.

4. Provision should be made in primary books especially for enlarging the child's fund of number concepts.

5. Problems, processes and topics should be excluded from texts when they cease to have a wide sanction in social usage; on the other hand, new topics, new processes, and new types of problems should be admitted to texts only after they have been subjected to this same test.

6. The emphasis placed on the various phases of arithmetic included in the text should be in proportion to their probable value for the child.

7. Textbooks in arithmetic should be adapted to the children for whom they are chosen.

a. The type, illustrations, and language should be appropriate to the age of the children who will use the books.

b. They should be examined with reference to any peculiar requirements not found in the average community.

c. They should make provision for varying abilities among children of the same grade by the presentation of much easy material as well as plenty of more difficult matter.

8. Arithmetic texts should proceed by carefully graded steps from the easy to the more difficult both in the matter of processes treated and problems presented.

a. The generally accepted distribution of topics by grades seems likely to persist because of its conformity to this demand and its agreement with important psychological facts.

b. If the modified spiral method is followed

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SCORE CARD					
Standards in Outline (These should be interpreted by reference to full statements above)	Appor- tioned Value on basis of 1000 points	Texts Judged and Values Assigned.			
		(Titles to be inserted here)			
1. The problem form of development.	100				
2. Skillful motivation of drill work and reviews.	150				
3. The nature of the thought problems.	250				
4. Provision for enlargement of number concept.	25				
5. The exclusion of obsolete material and worth of new material.	100				
6. Regard for relative value of topics included.	50				
7. Adaptability to children of the average community.	75				
8. Easy grading of processes and problems.	100				
9. Suggestions for work of local interest.	25				
10. Appendix and Index.	50				
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Score Card Devised by the Author for Judging Textbooks in Arithmetic.

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COLORS AND SURFACES FOR SCHOOLROOM WALLS AND CEILINGS

G. B. Heckel, Philadelphia, Pa.

A generation has passed away since Dr. Simon D. Risley, then a young specialist recently graduated from the University of Pennsylvania, started an investigation of the eyes of public-school children in the City of Philadelphia. What he discovered is fully set forth in the medical literature of the period, and what his findings effected is manifested in municipal school buildings all over the United States.

But knowledge percolates slowly, and while there has been much amelioration, conditions in general are still far short of ideal—in some communities they are far short of tolerable. It is with the hope of helping just a little towards the relief of a helpless class of potential fellow citizens that the present series of articles has been planned.

Sir John Lubbock long since called attention to the fact that in the present condition of various tribes and nations we have an epitome of human development—archaic, palaeolithic, neolithic, bronze and iron, up to “civilized and enlightened.” In the same way, by an excursion thru communities ordinarily included in the last and highest classification, we shall find civilization represented in all its stages, from the “dark ages” to the age of “light and leading.”

I have often thought and said that the prime defect of our modern system of education is that it is too entirely and emphatically a system. We are too prone to regard our pupils as raw materials—as figures in a table of statistics—rather than as embryo men and women. In practice we follow the classic example of Procrustes. From those that are too long for our bed we lop off the feet; of those that are too short, we stretch the necks. The child is manipulated to fit the system rather than the reverse.

Let us look at the matter rationally, as American citizens, interested in the future of this great country of ours. Institutions, states, civilization, exist for and depend upon the children. They are the raw material of the future, and but for them and for the hope embodied in them the whole machine might as well stop here and now.

This being the fact, what we owe to them is exactly the measure of what we owe to our country and to the world in which we live. Do we not then owe to them sound bodies, healthy organs, correct information, normally functioning minds? All these it is in our power to give them, all these it is in our power to withhold.

If we vitiate the body by insanitary conditions, if we impair the organs by detrimental arrangements, if we furnish information that is misleading, if we stuff the mind instead of cultivating it, we shall have done our best towards destroying our country and thwarting civilization.

First and foremost the school is for the child, that he may become a good, efficient citizen; not for the teacher, that he may earn a living; nor even for the School Director, that he may have standing in his community.

All of this being conceded it is our duty, first, to see that our schoolrooms are wholesome and sanitary and, next, to see that they are comfortable, desirable and properly designed for their purpose.

I speak from a full heart. In school as a boy, in college as a youth and in a professional institution as a young man, my impression was always that the main object of these “Holy Offices” was to force me to do what I did not

wish to do in the way most distasteful to me, and in conditions the most uncomfortable. From my own sons, who have recently run the same gauntlet, I do not gather the impression that educational authorities have yet caught up with the times.

The subject is so large and my feeling on the matter so full that I am tempted to range far beyond the limits of my text. However, one of the factors that bulks large in the matter of sanitation, comfort and safety, is the color, texture and character of schoolroom walls and ceilings. As Dr. Risley, to whom I have already referred, has recently pointed out, it is largely a question of luminosity. If a schoolroom be not adequately lighted the eyes, and from the eyes the health, will permanently suffer. The light must come from the right direction, must be sufficient, and must be of the right kind. Also as a factor in the problem the color of the light must be taken into consideration; for tho the matter is still obscure and tho complete data are still lacking, it is pretty generally held by physiologists that the emotions are, to some extent at least, influenced by color. Dr. Risley, I believe, maintains that this effect is due entirely to the varying luminosity of the different colors, but even, if this be the explanation, the practical results are the same.

The light, as everyone knows, should be, preferably, diffused daylight and plenty of it. It should fall on the work over the left shoulder or, better still, be so diffused that it comes from all directions with equal intensity; it should be free from glare. In these three sentences we have the specifications complete as they affect the question of illumination. How these specifications may best be fulfilled is the only remaining problem.

It is a primary proposition in lighting that light may be either reflected or absorbed by the surfaces on which it falls. Here the physical properties of color come into play. An ideal white surface would be so because it reflected all the light falling upon it. An ideal black surface would owe its blackness to the fact that it absorbed all the light falling upon it. Between absolute whiteness and absolute blackness we have the colors of the spectrum, ranging from the most reflectant or most luminous to the least reflectant or least luminous hue. Each of these becomes decreasingly luminous as it becomes deeper or darker, and more luminous as it becomes lighter, or as it is expressively stated, brighter. The least luminous shade is nearest black; the most luminous tint is nearest white. From the point of view of those who consider the psychologic effect of moment, the preferable colors are the secondary or mixed tones near the most luminous end of the spectrum,—orange and green, for example.

Mr. Henry A. Gardner, at the Institute of Industrial Research, Washington, D. C., not long since conducted an investigation on the light reflecting values of pigments, the results of which were reported in a bulletin, now out of print, but which is admirably summarized in Circular No. 43, issued by the Educational Bureau, Paint Manufacturers' Association of the United States.

In this research it was found that a block of magnesia reflects 88 per cent of the light falling upon it; a light cream tint paint, 66 per cent; a light pink, 60 per cent; a light yellow, 58 per cent; a light blue, 55 per cent; down to a solid chrome green, which reflects only 11 per cent.

Remembering, from common experience, that pure white is not a pleasing color, it is obvious

that we should select one of the highly luminous “cheerful” tints for our schoolroom walls, leaving the white for the ceiling, where it will be seldom seen, but whence it will do its most efficient work in reflection. As for the tinted walls, since they will be less luminous because of their tint, the solution is to increase the quantity of light to be reflected, so that the total illumination may be adequate.

What may be effected by proper attention to these principles is illustrated by a letter from the engineer of an important corporation in Pittsburgh, who states that after reading Mr. Gardner's bulletin on the subject, he caused the interior of the Company's office building to be repainted in accordance with these recommendations. As a result he cites one room which previously required 2,000 watts to light it properly. The same room is now, after repainting, equally well-lighted with only 900 watts.

Direct daylight is, of course, best; but artificial light is better than insufficient daylight and this artificial light, if necessary, should be so diffused that it approximates daylight in its effect. I quote from an address on the subject presented by me two years ago to an Association of Master Painters:

“The last word in modern illumination is the diffusion of strong, clear light by means of reflecting surfaces, closely simulating daylight in its quality and character.

“This method is what is known as ‘indirect illumination,’ of which a pleasing modification is the form known as ‘semi-indirect,’ in which a portion of the light is reflected and a portion transmitted thru a translucent medium.

“For the reflection of light the most effective medium is a plane, polished white surface. Such a surface reflects the greater proportion of the light falling upon it, according to the familiar law that the angle of reflection is equal to the angle of incidence, but gives us a secondary image of the source of light, emitting rays reduced in intensity, in conformity to the law that intensity of light is inversely proportional to the square root of the distance from its source.

“With such a reflecting surface we should succeed only in reducing the intensity of our light.

“An enamel or an oil paint would act substantially in this way. Our reflecting surface, in order to effect the required diffusion, must reflect the light falling upon it in every direction, and since a surface will reflect light only in straight lines, at an angle exactly equal to the angle at which the initial rays fall upon it, we must provide a reflector which shall present planes at every possible angle to the source of light.

Such a surface is admirably provided by the so-called ‘flat’ or matt surfaces formed by lustreless coatings, of which by far the most satisfactory are the modern flat wall paints, finished preferably by stippling.

“Such a surface will satisfactorily reflect the light in all possible directions.

“We know from Dr. Risley and Dr. Heckel that the physiological significance of color is largely a matter of luminosity.

Given a primary source of light of sufficient power, the proportion made effective for use in a system of indirect illumination will be in inverse relation to the absorption value of the color of the reflecting surface.

“Now an absolutely plane white surface (if such a surface could be produced) would reflect all of the light falling upon it. Next in reflecting value comes yellow, followed by orange, green, blue and red the luminosity of each being in-

Note—This article is the first of a series on the painting of school buildings to be printed in the Journal during the year. The author has an international reputation as an expert on the chemistry and use of paints and has been for many years editor of the leading technical paint journal in the United States.—Editor.

versely proportional, of course, to the purity of the color. In other words, a blue tint, containing more white than pure blue, is the more luminous.

"These color laws are absolute and hold not only for what we are accustomed to regard as reflecting surfaces. All surfaces in a lighted room are reflecting surfaces and the color of the hangings, the woodwork, the furniture, the floors, plays an important part in increasing or decreasing the total effective illumination.

"Indirect or semi-indirect illumination is the most pleasing method yet devised for the diffusion of light in quarters where the eyes are habitually used. A portion of the light supplied is necessarily lost by this method because of the physical laws involved. It therefore behooves us to utilize the remainder to the fullest extent. This may be accomplished in the indirect system, by placing the source of light as near as practicable to the main reflecting surfaces, and by seeing that the latter are properly efficient in respect to texture and color. In the semi-indirect method the correct situation for the source of light is the mean between the effective values of the proportions of light transmitted and reflected."

I have quoted rather liberally from this talk because it very nearly covers the subject. Parti-

cular attention is directed to the paragraph relating to texture and color, method of treatment of surfaces, and the part played by the color of furniture, floors, hangings, etc.

If large sections of schoolroom walls are covered by "blackboards," the volume of light supplied should be correspondingly increased to compensate for the light-absorbent effect of such surfaces. Maps and diagrams also play their part in absorption or reflection. They should be on rollers in light colored cases and out of the way when not in use. The furniture should be light in color and, if on iron frames, they should also be painted in light colors. The floors, if not of light colored wood, should be stained or painted in a light color and well varnished with a good floor varnish.

I have recommended modern flat wall paints for walls and ceilings. "Flat" surfaces can be produced with lead and oil paints, but such paints usually do not hold their light color as well in interiors. As a general rule, zinc paints or lithopone paints (that is, flat wall paints) are preferable for interior use. The latter, however, should not be used on window frames, sashes or sills, since lithopone darkens in direct sunlight. The proper paint for these is an enamel or an oil paint containing a high percentage of zinc. This preference also holds for doors, base-boards and other interior woodwork.

In preparing plaster surfaces for painting the proper procedure is to stop all cracks, nail holes, etc., with plaster-of-Paris.

Then, if recommended by the manufacturer of the paint selected, apply a coat of the undercoating supplied by him. If not, make a solution of zinc sulphate in water, one pound to the gallon, and apply to the entire surface with a kalsomine brush. Allow 24 hours for drying, then apply three coats of the paint, allowing each coat three days for drying.

Pleasing variety may be given to the treatment, if desired, by the introduction of a frieze with stencilled pattern, and a dado, if the construction of the room suggests such treatment.

My last word on the subject is still a plea for the children: Give them light, physical as well as mental; give them beauty that shall make them seek, rather than shun the schoolroom; give them sanitary surroundings by washing the painted surfaces at regular intervals—and by the way, there is no more efficient disinfectant than fresh paint: the vapors it gives off in drying are germicidal. In short, remember that we who equip and "run" the schools are of the past, or of the present at best—that the future belongs entirely to the young; and whether that future shall be bright and glad, or dark and sad, depends upon what we do here and now to "the least of these."

THE SAFEGUARDING OF EXISTING SCHOOL BUILDINGS AGAINST FIRE

An Important Report of the International Association of Fire Engineers

The International Association of Fire Engineers, at its recent convention, accepted a suggestive report on the safeguarding of school buildings against the dangers of fire. The report is of more than passing interest to school authorities because it is an expression from the best technical authorities in the United States. The report speaks for itself.

From various sources we find that fires occur in school buildings on an average of one fire for each day in the year; that it is estimated that 125 of the buildings are practically destroyed; that over 250,000 school buildings in the United States are built in such manner that they are an easy prey for fire, and that the majority of the 20,000,000 school children and students are housed in buildings that are little better than firetraps.

From the figures of the Actuarial Bureau of the National Board of Fire Underwriters, we find that in the year 1915 there were 310 fires in day schools with an insured loss of \$2,400,000. These figures do not include fires in colleges, universities, boarding schools, convents, etc.

It is estimated that the total losses for all kinds of insured school buildings for the year will be \$3,200,000.

There is no record of losses on buildings which were not insured or of losses where the insurance was carried by the cities and towns.

In the report of the Wisconsin Industrial Commission we find the following:

"There are only two classes of buildings where attendance is involuntary—Schools and Jails. If the house or flat in which you live is a fire-trap you can move out. If you believe a certain hotel or theatre is unsafe you need not patronize it. But if your school is in daily danger of becoming a fiery furnace the law compels your children to attend just the same."

The American people have given less thought to the protection of schools from fire, and the lives of the children that attend them, than has been given to almost every other class of build-

ing. They have fallen into a state of self-satisfied assurance into which the great public is apt to lapse and from which it can only be awakened, and then for a short time only, by some disaster, to again drop back into the old rut of assurance that it may not happen in their community, and why worry over things that do not come near to their own doors.

In Massachusetts, after the Peabody schoolhouse fire which occurred on October 28, 1915, a wave of horror passed over the entire state and the public demanded that something be done to safeguard the lives of children in the schools.

A meeting of the officials of the cities and towns of the Commonwealth, of citizens distinguished in the various lines of work which had to do with schools and schoolhouse construction together with representatives of hundreds of anxious parents, was called by the Fire Prevention Commissioner of the Metropolitan District to consider the condition of the schoolhouses of Massachusetts and to recommend methods for safeguarding them. The Governor of the State opened the meeting and there were men of conspicuous ability called upon to give their views on the subject. After a most thoro discussion of the whole matter, a committee of fourteen was appointed to consider what measures should be taken to safeguard existing school buildings.

This committee after weeks of painstaking effort, prepared a bill and presented it to the legislature which was then in session, and when the hearing was held before a committee of that body, city officials of a very few of the cities of the Commonwealth appeared in opposition to the bill and the only argument presented was money; it would cost too much to make the buildings safe. This was less than six months after the Peabody schoolhouse was burned and 21 little lives were sacrificed. Owing to the fact that more weight was given by members of this legislative committee to the standard of a few of the city officials, the bill was referred to the next year's legislature, which aroused such a wave of indignation that the Governor sent a

special message to the legislature urging immediate action, and as a result the bill was referred to a special recess committee which considered it later.

According to the report of Frank Irving Cooper, Architect, of Boston, Mass., submitted to the Fifth Congress of American School Hygiene Association in 1910, we find that of the 48 states in the Union, there were 28 states that had no laws or regulations whatever to prevent school buildings from being built to burn. Only eight states had passed laws bearing on schoolhouse construction and only two states had passed regulations controlling the plan of building.

The state of Ohio, according to this report, was the only state with a complete system of control of safe schoolhouse design and construction.

In the majority of cases the laws as they had been passed, state that plans of school buildings must be submitted to a superintendent or other official for approval.

This means a control by men and not by law, and it opens the way to corruption and favoritism, or to regulations which change with each succeeding administration. The regulations for the construction of school buildings should be enacted into law.

The tendency is to put the responsibility of making the law on the shoulders of inspectors and commissioners.

Each state should pass school building laws to govern the construction of all its school buildings, and these laws should be administered by a strong central authority, with sufficient inspectors to see that the law is complied with in every particular.

From the above statement of facts as to the control of the construction of school buildings as they existed up to the year 1910, it may readily be seen that the majority of buildings used for school purposes are a menace to the lives of the occupants.

In several of the states, the laws have since been made more stringent.

It is estimated that 85 per cent of school fires originate in the basement. By reason of the methods of installing the heating and ventilating systems therein the smoke is carried to every part of the building in an amazingly short time and a panic is sure to follow.

Your committee, therefore, feels that the basement is the danger spot in schoolhouse construction and should be given the most serious attention with reference to alterations.

Basements containing heating apparatus but no classrooms, should be entirely cut off from the first floor and should be entered from the outside only. All partitions, ceilings and walls should be of masonry, or covered with metal lath and cement plaster, and all closets, of metal, or constructed in the same manner. All openings such as heat and air ducts should be fire and smoke-stopped with incombustible material. Whenever necessary to renew the heating plant, it should be placed in a separate building. Basements of this kind should be equipped with automatic sprinklers.

Where such basements contain schoolrooms occupied by children, and stairways leading to the upper floors are deemed necessary, they should be fireproofed with metal or other incombustible material, and equipped with two hand rails on each side suitable for both large and small children. There should be no concealed spaces underneath the stairways. They should be (if enclosed), cut off by partitions of metal lath and plaster fitted with self-closing fire doors which must not be held open during school sessions. There should also be direct exits from the rooms in the basement occupied by the children to the outside of the building. The heating plant should be isolated from the rest of the basement by means of brick or other fireproof partitions with fire doors, and all window openings in the basement should be fitted with metal frames and sashes with wire glass made stationary. If other portions of this class of basement are used for the storage of waste paper, packing cases, old school furniture and other classes of inflammable material, such portions together with the room enclosing the heating plant should be equipped with automatic sprinklers. If windows for light are necessary in the enclosed stairways, the openings should be fitted with metal frames and sashes with wire glass and the windows made stationary.

All doorways in cold air rooms should be fitted with standard fireproof and self-closing doors, and all openings to air ducts should be fitted with automatic fire shutters. All air ducts should be fitted with automatic fire shutters. All air ducts should be constructed of metal or other fireproof material. Smoke stops other than these should be provided between the different floors where possible.

Attics of wood construction and used for storage only, should be provided with automatic sprinklers, and stairs and other means of access from upper story to same should be cut off by metal lath and cement plaster partitions and self-closing fire doors from other parts, occupied or unoccupied.

In all schoolhouses piped with gas, the gas meters should be placed in fireproof rooms or closets. All gas brackets should be of the rigid one-arm type and the burners protected with wire cages. Gas ranges and stoves should be connected rigidly to the gas pipe and should be protected under and around them with sheet metal.

All such buildings should have readily accessible at the entrance nearest the gas supply mains, a wrench for closing the shut-off valve which should be located conveniently outside the building.



MARK TWAIN ELEMENTARY SCHOOL.

A one-story saw-toothed skylight construction type.

All electrical installations of lights, fixtures, and equipment, should be made and maintained in accordance with the provisions of the "National Electrical Code." All electric heaters should be so placed that there is no danger from fire by their use.

In case it becomes necessary to keep or store volatile, inflammable fluids, such fluids should be kept in safety cans in small quantities. Metal cabinets should be provided for the paints, oils, etc., kept in the manual training rooms. All chemicals which are liable to react to cause fire should be kept in fireproof compartments or receptacles. Oily waste, rags, and oily mops are subject to spontaneous combustion and represent a definite hazard, and therefore should be kept in metal receptacles, always in plain sight. Waste paper, etc., should be kept in metal receptacles with self-closing covers and the contents removed from the building daily.

Children in the second grade or under should not be housed above the first floor and there should be exits from such room directly to the outside, where possible.

Classroom floors are generally so fully occupied by people that the starting of a fire on any of them during school hours is unlikely, and if started, may generally be easily extinguished, therefore, by eliminating closets containing inflammable material from the classrooms, there is little danger, if any, from fire. Fire extinguishers should be placed in corridors and other parts of the building.

Doors from classrooms which seat only an ordinary class may open either in or out, and preferably there should be only one door to the corridor, and one or more to the adjacent rooms for each room. If there is only one door to the corridor, the class is more under the teacher's control. Control at this point is the chief factor of safety. If the door opens out, it should not block the corridor space, but should be recessed. Doors from assembly halls should always open out and should have self-releasing devices so that they can always be opened by pressure from within. Where there are partitions shutting off stairs, the door in such partition should open from corridor directly opposite the stair going down, and should have no locks or latches, but be equipped with self-closing devices only, and should open so as not to block the landing. Doors to fire escapes, i. e., definite exits for use in emergency rather than for daily use, should have self-releasing devices allowing the doors to

open out. There should be no outside vestibules, but if they are retained, the doors should open out and have no fastener. These doors are safer than double swing doors. Outside doors should be equipped with the bar and panic bolt (so-called), whether they be single or double, and the batten of all double doors should be placed on the outside of the door, and not, as is the usual practice, on the inside. Such doors should in all cases open outward.

Shops for manual training, kitchens where cooking is done, sewing rooms, chemical laboratories, storage rooms for wood, paper and other inflammable material, should not be located in the basements, but in the attics or upper stories of all school buildings, cut off from schoolrooms and assembly halls on the same floor by metal lath and plastered partitions and self-closing fire doors, and be equipped with automatic sprinklers.

Portable schools with stove therein should have two exits.

Corridors should be kept clear of all inflammable material and be free from all obstructions.

Stairs should be kept free from all obstructions, and if doors obstruct landings they should be removed. All stairways should be provided with four hand rails, two on each side placed one above the other at such height as to be suitable for the older and younger scholars. Stairs over five feet in width should have center rails, one above the other similar to those on the sides. There should be no doors at the bottom of stairways. A free and unobstructed passage should always be maintained from one floor to the other. Properly constructed stairways are far more reliable than outside fire escapes, so-called, for practically all such fire escapes now in use on school buildings are absolutely useless as a means of safe exit for school children in case of fire or panic, and until properly reconstructed, they are a real source of danger.

In buildings over two stories high, the escape should be of the smoke-proof tower type or by outside enclosed stairways, and these should be constructed of fireproof material. Fire escapes which pass windows from which smoke and flame may issue, are useless and should not be regarded as a safe means of exit.

Mechanical gongs not less than eight inches in diameter should be installed on every floor, and so arranged as to be operated from any one of them, and to be used in case of fire in the

building and fire drills only. No complicated code of signals should be used or attempted. Mechanical gongs are the simplest and most reliable. Electric and electro-mechanical gongs operated by an open circuit battery should never be relied upon; where such gongs are already installed or where it is not possible to install and operate mechanical gongs, closed circuit or secondary batteries should be used if possible.

Fire drills should be held not less than twice each month during the school year, the manner of conducting such drills to be approved by the Chief of the Fire Department who should have access to the school buildings at all times. It is advised that these drills should be used as a means of impressing on the minds of the children the importance of leaving the building

(Continued on Page 46)

SUPERVISION OF THE HIGH SCHOOL BY THE CITY SUPERINTENDENT

Geo. H. Beasley, Liberty, Mo.

My search for material upon this topic has convinced me that very little has been written upon the subject.

The city superintendent is an officer who is regarded by many as a supernumerary. He has no legal status. His qualifications and duties are not definite. He is regarded by many teachers and some school boards as rather convenient to run errands, to sell tickets for school entertainments, to make reports, distribute pay checks to the teachers and to answer the phone—notifying pupils to bring home five cents' worth of thread or possibly a head of cabbage.

I am reminded of an experience which I had upon taking charge of a school in this state, in the middle of the year. When I had been there only a week the grade cards were ready for distribution. I looked them over and found that some little ones in the third grade had very low deportment. I wondered what could be the cause and asked the principal of the building to bring the pupils into the office. She brought ten of them in. I talked to them and called their attention to this card and asked them what it meant. I said: "Who is this talking to you?" They could not answer. "What is a superintendent for?" "To whip the kids," came the quick response. I explained that I would not accept a job of that kind and asked again what the superintendent was for? "To look after the teachers and tell us when there is a fire." I said, "No, the janitor could do that." I pushed the matter further and one of them said, after a great deal of hard swallowing, "To look after the teachers and draw his pay."

I am convinced that there are plenty of people in Missouri who have no better notion of the function of the superintendent than did these little children.

In the short time which is allotted to me, I shall discuss briefly some of the things which should be classed under the head of Supervision of the High School by the city Superintendent.

The prerequisite for a good high school is good work done in the grade school. It often happens that money is spent in the high schools for equipment and apparatus scarcely needed and seldom used when the children of the grades are crying for bread, as it were, for they are denied not only the needed material for their work in drawing, papercutting, clay modeling, etc., but actually have to do without supplementary readers.

The first problem therefore of the city superintendent is a business one, namely: to run the school justly and economically—not at a less tax rate but with the purpose of obtaining the greatest efficiency with the funds at hand.

I claim, therefore, that the city superintendent is performing his function as a supervisor of the high school when he is doing any one of the following things:

1. Selecting a competent corps of teachers.

2. Unifying the school system and making an equitable distribution of forces and funds.

3. Determining the length of the school periods.

4. Determining the length of the school day.

5. Determining the content and sequence of studies in the high-school curriculum.

6. Determining the length of classes to be taught by each teacher.

7. Determining the number of pupils in each class.

8. Determining the number of studies to be taken by the pupils.

9. Determining the subjects which should be alternated by years.

10. Helping to give the right attitude and create a wholesome school spirit.

11. Providing for the uses of school activities to motivate school work.

12. Last, but not least, supervising classroom instruction.

Efficient Teachers.

The most important problem of the high school is that of securing a competent corps of teachers. The teacher is the real dynamic force of the school. Good teachers are the one indispensable necessity. The reason the high school product is criticised, and is unsatisfactory to the state and to higher institutions, everywhere, is, first, our lack of teaching ability. So long as we have inferior teachers no amount of supervision will prevent our failure to produce satisfactory results.

The city superintendent who is to be held responsible for the right kind of a high school in the community must be given a voice in the choice of and power to control the corps of teachers for the same reason that the manager of a large business is given a voice in the choice of his co-workers.



SUPT. GEO. H. BEASLEY,
Liberty, Mo.

Course of Study.

Public high schools have entered upon a new and rich field of service. Its pupils no longer look chiefly to the college and the learned professions, as people called them years ago. Within the memory of all of us high schools were to prepare for college. Not so today. In addition to preparing for college, our boys and girls want to prepare immediately for business and for life. The boys demand agricultural training, mechanical arts, including drawing and drafting, patternmaking, foundry practice, joinery and machinework practice. The girls call for dressmaking, costume-designing, millinery, cooking and household economy; boys and girls alike want stenography, and accounting and economics. Hence it is no small part of the supervisor's duty to provide a curriculum to meet these needs as well as may be.

Distribution of Classes.

The superintendent who wishes to make the best use of the funds appropriated, must determine the number of periods in the school day; the number of periods to be taught by each teacher; the number of daily recitations for each pupil, etc. These items are of professional and economic value to the high school and constitute a very important part of the work of the supervisor. Their adjustment will vary with the community, the funds available, and with the ideals and purposes of the school.

Supervising Classroom Instruction.

One wonders if, after all that has been outlined as a part of the work of the city superintendent as supervisor of the high school, there is anything else left for him to do.

With the building in shape, equipment bought and distributed, the curriculum arranged and agreed upon by the board of education and by the principal and teachers, classifications arranged and programs made out; the number of periods per day, the number in each class, the number of classes, the daily routine automatized, all of these things having been adjusted there yet remains the important function of supervision of classroom instruction. This calls for many conferences with teachers and with pupils in groups and individually, and for classroom visitation. Fortunately when the superintendent has succeeded in securing and in holding the services of really competent teachers, classroom visitation is less important, nevertheless we will fall short of our duty and our privilege if we do not thus contribute to the interest of the high school. Those visits give us the opportunity to suggest, to stimulate and elevate the work.

As we go from room to room it is refreshing to see that the skillful teacher causes the pupils to do some real thinking; makes them realize the purpose of the instruction given; teaches them to weigh values; to organize ideas, and develops the power of initiative. We find some things to criticise but the true supervisor will find much to commend. In my own experience I find methods and devices used which, to me seem worthless, and have to restrain myself from making adverse criticism but later when called to hear the class recite, I am delighted with their knowledge of the subject.

In conclusion, then, it is the chief business of the superintendent as related to the high school to solve the following problem: Given buildings, equipment, body of students, corps of teachers, janitors, patrons, parent-teacher association, various clubs and student activities, to establish among the group the right attitude toward the equipment, toward the school and toward each other; and to place the members of the group where each will function best, to the end that all may do team work for the upbuilding of the individual, the community and the state.

Note—The present paper was read before the Department of City Superintendents of the Missouri State Teachers' Association, held at St. Louis, Mo., Nov. 16, 1916.

FINANCIAL PRACTICES IN CITIES AND TOWNS BELOW TWENTY-FIVE THOUSAND

Prof. George M. Baker, University of Kentucky

Part III

This section of our study deals with financial accounting and reporting as practiced by the smaller cities and towns. Our material has been secured by questionnaire, personal interviews, and from superintendents' annual reports. We have included mention of the new accounting system recently put into effect in Minnesota, giving the forms required of the high schools. We have included examples of financial reports having special values. One of these is from a large city, and is exhibited here to demonstrate that complete yet relatively concise reporting is not impossible even in a system of great magnitude. Another report is from a city of some 40,000 population, while parts of others are selected as being fairly typical of the practice of the smaller places, where reporting is not so well handled as a rule. This section also includes a treatment of graphic presentation, in connection with which we are permitted to quote some highly serviceable material from the invaluable book by Mr. Willard C. Brinton, on "Graphic Methods for Presenting Facts."¹

We shall attempt to develop the need for improvement of practice in the direction of accounting and reporting on the part of school officials. We shall conclude our study with an urgent recommendation for the adoption of the United States standard schedule for reporting fiscal statistics, or some modification thereof in conformity with local legislation, etc. The most urgent need at present is that of some degree of uniformity in the direction of handling financial affairs. The complete standard schedule is reproduced here for the reason that we feel it is unfamiliar to all too many superintendents and board members in the smaller cities and towns. The same was formerly issued by the United States Bureau of Education as Bulletin No. 3, 1912, but at present is out of print, hence its appearance here.

Need for Improvement.

To anyone at all familiar with school accounting and reporting, it is a well-known fact that here is the weakest part of our school system, as a general rule. Chas. P. Mason, Secretary-Treasurer of the St. Louis Board of Education, said in an address given before the National Association of School Accounting Officers at Memphis, May, 1914: "Great difficulty is encountered in trying to find out from their annual reports something about the finances of a city, state, or other bodies disbursing public funds. In very few of them has anything of importance taken place in recent years from a perusal of their later reports. The same system of accounting, and the same loose practices still remain, and naturally, the same confusion results."

In the March, 1916, issue of this Journal, under the head of "Progress in School Administration During 25 Years," the editor has published replies from a group of representative state superintendents of public instruction. These indicate lines of progress made in their respective states during the past 25 years. *In none of them is any mention made of a gain in the direction of improvement of practice in handling and reporting school finances.* The explanation of this is hard to fathom. Perhaps it lies in the fact that this is a matter so easy of accomplishment. Reformers like to wrestle with difficult tasks, and have therefore eschewed this fundamental issue of improvement of financial practices. Improvements have been made

very generally in amounts of money secured for maintenance of schools, but not in the manner of handling the same. These state superintendents either do not regard this as a matter of sufficient importance to mention, or no improvement has been effected. From our examination of recent annual or biennial reports emanating from the offices of state superintendents, we strongly suspect the latter to be the correct assumption.

Mr. W. E. Andrews makes the following trenchant statement:² "As yet financial determination in (high) school management are arrived at with the freedom characteristic of those who have the privilege of spending other peoples' money without the responsibility of being held sharply to account for the disbursements." There is more truth than poetry in this statement.

There are several reasons for this condition of things. The lack of men of business caliber on boards of education in the smaller cities and towns is lamentable. Again, public business does not often meet with the same degree of care and attention that private business receives. In public business, anything is good enough so long as it gets by, seems to be the evident opinion. No one is expected to read the statements prepared, etc. A school official recently told the author in substance that the public does not want to know anything about such affairs, and therefore, there was no use to attempt to inform them. In our opinion, that official has outlived his usefulness as a public servant. The public itself is largely at fault. Not infrequently it is well-nigh impossible to get enough people out in a small town to conduct an annual school meeting. Those who refuse to attend should see to it that they refuse to find fault. The per cent of the adult population that ever takes the trouble to read an annual report is practically negligible. This introduces the third reason for the existence of this condition of things, namely, the character of the reports. Financial reports are of two main types—those characterized by meagerness of data and lump-sum methods, and those of such technical character as to be of interest and service only to trained accountants, bank directors, etc. Viewed from another angle, reports are of two other types—those devised in more or less accordance with the United States standard schedule, and those designed along independent lines in accordance with local initiative, sometimes to conform with state department practices and sometimes not. These latter varieties are subject to little or no control, nor subject to any censorship save that emanating from those devising the same.

Financial statements as a rule are not designed with the general public in mind as an audience. They are particularly unattractive and frequently disappointing reading matter. One can get nowhere in their perusal; they throw no light on the situation. If one is seeking light, this is not likely to enhance his notion of the efficiency of the administration of his school system. Reports not infrequently conceal rather than reveal the true situation. This may be

²School Board Journal, August, 1916, p. 12.

Editor's Note—This article is the fifth installment of an important series of papers discussing financial practices of school boards in small cities and villages. The author, who is at the head of the Department of School Administration in the University of Kentucky, has been a student of the problem of financing schools for a number of years and writes with a very clear knowledge of conditions in many communities.

intentional—or otherwise. If such practice does not lead to graft, its continuance at least invites it. All this is highly reprehensible. There is absolutely no excuse to be advanced in extenuation of such practice. The public furnishes the money, rather cheerfully, and it has a right to be informed of what is done with it. It has the right furthermore to demand that it be informed in the best possible manner, that all who run may read without labored study and increasing mystification and exasperation. How else can the rational administrator expect to continue to secure increasing amounts of money from the public but on the basis of proven ability to wisely use what he has already received? Apropos to this, let us take the following statement from Dutton and Snedden's well known work: "In the last analysis the support, financial and moral, must come from the masses of the people, who, in a democracy, constitute the powers of control. To procure the co-operation of intelligent citizens, who generally create the public opinion which others follow, it is essential that those standing in expert relations to the public school systems should court publicity. Legislators, members of boards of education, and other interested parties are not able to follow the intricacies of obscure statistical presentation, either from lack of time or lack of ability. It is necessary, if they are to be kept informed, that quantitative statements of all kinds should be exhibited in the plainest possible form, reduced to easily comprehended units, and interpreted by graphs or language where necessary." This is Utopian. Wherein lies the means of attainment? Present loose practices must be abandoned. The "trial and error" method must give way to scientific business method. The superintendent, the "efficiency expert" of the school system, must lead the way to this reform, or step down and out in competition with the man who has elsewhere proved that he can render this service.

3 Criteria of Reports.

According to Dutton and Snedden, the value of a published statement, especially a financial statement, depends on the following:³

- (1) Its truthfulness.
- (2) Its explicitness in clear classification and easily understood statement.
- (3) The amount of interpretation and comparison which it provides.

Judged by these three standards, the average financial report falls egregiously short. It is sometimes not even truthful as we have discovered by diligent study of many annual reports; often it is not clear, and seldom indeed does it afford any interpretation and comparison. There is no reason why, with the exercise of little care, any financial statement might not measure up to all three of these criteria. To accomplish this would not require any special training. The practice of securing and running thru several good annual reports each year would furnish the superintendent with much suggestive material, which he could modify to suit his own needs. The chief difficulty lies in the dearth of the right kind of material rather than in any disinclination to profit by the same.

Graphic Presentation.

The third criterion given above for the published report demands interpretation. This "interpretation" may be either in a printed statement or a graphic device, or both, the latter to interpret the former. Graphic devices are preferable to printed matter alone for obvious rea-

³Administration of Public Education in the United States, p. 533.

¹Published by the Engineering Magazine, New York, N. Y. \$4.00.

DEPARTMENT OF THE INTERIOR,
BUREAU OF EDUCATION,
WASHINGTON, D. C.
DIVISION OF SCHOOL ADMINISTRATION.

STATISTICS FOR THE FISCAL YEAR ENDING 191

CITY PUBLIC SCHOOLS.

PART II.—FISCAL SCHEDULE (Standard Form).

Schedule adopted at a conference of the Committee on Uniform Statistics of the Department of Superintendence of the N. E. A., the National Association of School Accounting Officers, the U. S. Bureau of the Census, and the U. S. Bureau of Education, and approved by the Department of Superintendence at its meeting in Mobile, Alabama, on February 23, 1911.

Please fill out this schedule and forward it to "The Commissioner of Education, Washington, D. C." in the inclosed return penalty envelope.

Obviously, not many systems will report for all of the various types of schools which are listed below. On the other hand, some systems will desire to differentiate in greater detail. In this event, extra sheets may be used, writing in ink at the head of the column the name of the type of school, as, for example, "kindergarten," "college or university," "academic high schools," "manual training high schools," "parental school," "school for the blind."

Reports will be made on separate sheets for payments from (1) funds such as those called "trust," (2) from appropriations other than those for schools, or (3) in the case of an independent school district, when payments are made from the general municipal treasury instead of from the treasury of the school district.

EXPLANATION OF HEADINGS.

Total.—Under this heading include the sum of all figures in the columns to the right, these columns to contain no duplicates. Schools for the Industries.—Include only those schools which offer training in specific vocations. Do not include those schools in which instruction in hand training is offered with a general educational aim, as, for example, the prevailing type of manual training high school.

Special Schools.—Include schools for blind, deaf, feeble-minded, delinquents, dependents, etc.

Special Activities.—Include lectures, playgrounds, social centers, etc.

Explanation of items will be found on separate sheet.

A.—PAYMENTS.

I.—EXPENSES (Cost of Conducting School System).	TOTAL.	SALARIES.	OTHER OBJECTS.
EXPENSES OF GENERAL CONTROL (OVERHEAD CHARGES).			
1. Board of Education and Secretary's Office			
2. School elections and school census			
3. Finance offices and accounts			
4. Legal services			
5. Operation and maintenance of office building			
6. Offices in charge of buildings and supplies			
7. Office of superintendent of schools			
8. Enforcement of compulsory education and truancy laws			
9. Other expenses of general control			
10. TOTAL			

Standard Schedule for Reporting School Finances (Page 1).

sons. Everybody likes pictures. Most of us are concrete minded rather than abstract minded. Good graphic devices are often novel in conception and striking in appearance. They are interesting because ingenious. They catch and hold the flitting attention long enough to make the point at issue. They are snap-shot, labor-saving devices. Printed statements will not be read nor tables of figures studied, standing by themselves, save by the unusually interested party, hunting information rather than picking it up incidentally. For those who will read and study them, the printed statements and tables are probably preferable to the simplified graphic devices, for the reason that the latter are apt to be less correct than the former. The study necessary with the former will perhaps cause the impression to be more lasting than the snap-shot, easily acquired impression derived from the graphic device. For the ninety and nine, however we secure their attention by means of the graph and picture or not at all. These will not read and study.

The Brinton Book.

Every school administrator would be delighted with a copy of an invaluable book by Mr. Willard C. Brinton on "Graphic Methods for Presenting Facts." It is the only work of its kind on the market and meets a real need for those having to do with the presentation of facts and figures for public snap-shot assimilation. The book is unique in conception. Mr. Brinton states in his preface that it is designed not to be read, but to be turned thru for the pictures and cuts. Mr. Brinton knows the ways of the average reader, it appears. He states that by merely looking at the pictures and reading the concise legends and criticisms underneath each, the reader will be able to get the gist of the book of some three hundred pages in about one hour.

The following quotations from the preface of Mr. Brinton's book will show the purpose that it was intended to serve: "In the preparation of this book there has been a constant effort to present the subject to suit the point of view of the businessman, the social worker, and the legislator. Mathematics have been entirely eliminated. Technical terms are used practically not at all. Since the readers whom it is most desired to reach are those who have never had any statistical training, consistent effort has been made to keep the whole book on such a plane that it may be found readable and useful by anyone dealing with the complex facts of business or government. The written primarily for the non-technical man, it is hoped that this book may, nevertheless, prove convenient to the engineer, the biologist, and the statistician.

"A definite effort has been made to produce a work which can serve as a handbook for anyone who may have occasional charts to prepare for reports, for magazine illustration, or for advertising. * * * *

"It is believed that the owner of this book will find it feasible to run thru the various chapters and pages till he finds a chart most nearly like that which he desires to have made from his own data. * * * *

"Much careful labor has been expended in so arranging the book that a busy reader may get the gist of the matter by looking at the illustrations and reading only the titles and sub-titles. The main title under each illustration is intended to show exactly what the chart represents, just as if it were used in some publication relating to the particular subject matter of the chart. The sub-titles relate to method and give criticism of the chart as a whole. Tho the text gives much more detailed information concerning method than can possibly be put into sub-titles,

III.—OTHER PAYMENTS.

53. Redemption of bonds	
54. Redemption of short-term loans	
55. Payment of warrants and orders of preceding year	
56. Payments to sinking funds	
57. Payments of interest	
58. Miscellaneous payments, including payments to trust funds, textbooks to be sold to pupils, etc.	
59. TOTAL	
60. Balances at close of year at	
61. TOTAL PAYMENTS AND BALANCES	

B.—RECEIPTS.

REVENUE RECEIPTS.

62. Subventions and grants from State	
63. Subventions and grants from county	
64. Subventions and grants from other civil divisions	
65. Appropriations from city treasury	
66. General property taxes	
67. Business taxes (licenses, excise taxes, taxes on corporations, taxes on occupations, etc.)	
68. Poll taxes	
69. Fines and penalties	
70. Rents and interest	
71. Tuition and other fees from patrons	
72. Transfers from other districts in payment of tuition	
73. All other revenue	
74. TOTAL REVENUE RECEIPTS	

NONREVENUE RECEIPTS.

75. Loans and bond sales	
76. Warrants issued and unpaid	
77. Sales of real property and proceeds of insurance adjustments	
78. Sales of equipment and supplies	
79. Refund of payments	
80. Other nonrevenue receipts	
81. TOTAL NONREVENUE RECEIPTS	
82. TOTAL RECEIPTS	
83. Balances at beginning of year	
84. TOTAL RECEIPTS AND BALANCES	

C.—VALUE OF SCHOOL PROPERTIES.

CLASS OF BUILDINGS.	TOTAL VALUE OF SITES, BUILDINGS, AND EQUIPMENT.	VALUE OF SITES AND BUILDINGS.	VALUE OF EQUIPMENT.	INTEREST ON VALUE OF SCHOOL PLANT.
General control				
Elementary schools				
Secondary schools				
Normal schools				
Schools for the industries				
Special schools				

Standard Schedule (Page 4). See pages 2-3, opposite.

the reader who examines only the illustrations and titles, without reference to the text, will undoubtedly get a major portion of the vital material in the book. It is believed that an average reader may go thru the illustrations and the titles in about one hour. * * * *

We have permission to include here Mr. Brinton's "Checking List for Graphic Presentation," only part of which we have space for:

1. Are the data of the chart correct?
2. Has the best method been used for showing the data?
3. Are the proportions of the chart the best possible to show the data?
* * * *
8. Are the points accurately plotted?
9. Are the numerical figures for the data shown as a portion of the chart?
10. Have the figures for the data been copied correctly?
11. Can the figures for the data be added and the total shown?
12. Are all dates accurately shown?
13. Is the zero of the vertical scale shown on the chart?
14. Are all zero lines and the 100 per cent lines made broad enough?
15. Are all lines on the chart broad enough to stand the reduction to the size used in printing?
16. Does the lettering appear large enough and black enough when seen under a reducing glass in the size which will be used for printing?
* * * *
18. Is cross hatching well made with lines evenly spaced?
19. Can Ben Day work be used advantageously instead of cross-hatching?

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A.-PAYMENTS-CONTINUED.								
	TOTAL.	SCHOOLS AND SPECIAL ACTIVITIES.						
		DAY SCHOOLS.		EVENING SCHOOLS.		NORMAL SCHOOLS.	SCHOOLS FOR THE INDUSTRIES.	SPECIAL SCHOOLS.
		Elementary, including Kindergarten.	Secondary (High).	Elementary.	Secondary.			SPECIAL ACTIVITIES.
EXPENSES OF INSTRUCTION.								
11. Salaries of supervisors of grades and subjects.....								
12. Other expenses of supervisors.....								
13. Salaries of principals and their clerks.....								
14. Other expenses of principals.....								
15. Salaries of teachers.....								
16. Textbooks.....								
17. Stationery and supplies used in instruction.....								
18. Other expenses of instruction.....								
19. TOTAL.....								
EXPENSES OF OPERATION OF SCHOOL PLANT.								
20. Wages of janitors and other employees.....								
21. Fuel.....								
22. Water.....								
23. Light and power.....								
24. Janitor's supplies.....								
25. Other expenses of operation of school plant.....								
26. TOTAL.....								
EXPENSES OF MAINTENANCE OF SCHOOL PLANT.								
27. Repair of buildings and upkeep of grounds.....								
28. Repair and replacement of equipment.....								
29. Insurance.....								
30. Other expenses of maintenance of school plant.....								
31. TOTAL.....								
EXPENSES OF AUXILIARY AGENCIES.								
LIBRARIES.								
32. Salaries.....								
33. Books.....								
34. Other expenses.....								
PROMOTION OF HEALTH.								
35. Salaries.....								
36. Other expenses.....								
TRANSPORTATION OF PUPILS.								
37. Salaries.....								
38. Other expenses.....								
39. TOTAL.....								
MISCELLANEOUS EXPENSES.								
40. Payments to private schools.....								
41. Payments to schools of other civil divisions.....								
42. Care of children in institutions.....								
43. Pensions.....								
44. Rent.....								
45. Other miscellaneous expenses.....								
46. TOTAL.....								
II.—OUTLAYS (Capital Acquisition and Construction).								
47. Land.....								
48. New buildings.....								
49. Alteration of old buildings.....								
50. Equipment of new buildings and grounds.....								
51. Equipment of old buildings, exclusive of replacements.....								
52. TOTAL.....								

Standard Schedule for Reporting School Finances. (Pages 2 and 3.)

20. Do the Ben Day shadings selected have sufficient contrast?
21. Are all instructions for Ben Day work given so that it will be impossible for the engraver to make a mistake? * * *
23. Is a key or legend necessary?
24. Does the key or legend correspond with the drawing?
25. Is there a complete title, clear and concise? * * * *
27. Have all pencil lines which might show in the engraving been erased?
28. Is there any portion of the illustration which should be cropped off to save space?
29. Are the instructions for the final size of the plate so given that the engraver cannot make a mistake?
30. Is the chart in every way ready to mark "O. K."?

Mr. Brinton has a set of 25 rules for graphic presentation which we are permitted to include here. We have space for only a few of the most fundamental ones to the inexperienced. Mr.

Brinton introduces the rules with the following: "The English language has a grammar with hundreds of detailed rules concerning almost every possible construction. The graphic presentations are used to a very large extent today, there are at present no standard rules by which a person preparing a chart may know that he is following good practice. This is unfortunate because it permits every one making a chart to follow his own sweet will. Many charts are being put out today from which it would seem that the person making them had tried deliberately to get up some method as different as possible from any which had ever been used previously. Anyone of us would be thought of as a freak instead of as a genius, if he tried to invent his own constructions for the English language and to place words in some order never seen before, yet many persons are doing something akin to this when they attempt to present data by some new and outlandish method of charting. Below are given a few rules which may be of assistance toward getting graphic

presentations more on a standard basis so that they may be instantly read. These rules are included here simply as suggestions, and they should be considered as only tentative until such time as definite rules have been agreed upon and sanctioned by authoritative bodies."

Rules for Graphic Presentation.

1. Avoid using areas or volumes when representing quantities. Presentations read from only one dimension are the least likely to be misinterpreted.
2. The general arrangement of a chart should proceed from left to right.
3. Figures for the horizontal scale should always be placed at the bottom of the chart. If needed, a scale may be placed at the top also.
4. Figures for the vertical scale should always be placed at the left of a chart. If needed, a scale may be placed at the right also.
5. Whenever possible, include in the chart the numerical data from which the chart was made.
6. If numerical data cannot be included in the chart, it is well to show the numerical data in tabular form accompanying the chart.
7. All lettering and all figures on a chart should be placed so as to be read from the base or from the right hand edge of the chart.
8. A column of figures relating to dates should be arranged with the earliest date at the top. * * * *
10. When charts are colored, the color green should be used to indicate features which are desirable or which are commended, and red for features which are undesirable or criticized adversely. * * * *
13. For curves drawn on arithmetically ruled paper, the vertical scale, whenever possible, should be so selected that the zero line will show on the chart.
14. The zero line of the vertical scale for a curve should be a much broader line than the average co-ordinate lines.
15. If the zero line of the vertical scale cannot be shown at the bottom of a curve chart, the bottom line should be a slightly wavy line indicating that the field has been broken off and does not reach to zero.
16. When curves are drawn on logarithmically ruled paper, the bottom line and the top line of the chart should each be at some power of ten on the vertical scale. * * *
19. When the horizontal scale expresses time, the lines at the left and right-hand edges of a curve chart should not be made heavy, since a chart cannot be made to include the beginning or the end of time.
20. When curves are to be printed, do not show any more co-ordinate lines than necessary for the data and to guide the eye. Lines 1/4-inch apart are sufficient to guide the eye. * * * *
25. Make the title of a chart so complete and so clear that misinterpretation will be impossible.

These rules ought to be of service to the superintendent desirous of making effective use of graphic devices. Graphic presentation is often very poorly done in superintendents' annual reports. Things are often very grossly misrepresented, with probably no premeditated intention. Again, the presentations are not sufficiently clear to be of much service. The legends are frequently ambiguous and misleading. Good graphic presentation ought to be made much more use of than it is by schoolmen.

(Continued in March Issue)

The Training of Teachers in High Schools

A. A. Gray, Berkeley, Cal.

Perhaps at no time in our history, save when Horace Mann awakened New England, has there been such a stir for educational reform as is found in the opening years of the twentieth century. During these years, school attendance increased tremendously, multiplied millions were invested in new buildings, state systems of education were completely reorganized, and the expenditure for our common schools greatly increased, totaling, last year, almost the billion dollar mark.

Our production of educational literature increased rapidly. Special reports, surveys and various investigations found their way into print; city and state school reports became more frequent and more extensive. From our state legislatures poured numerous laws. The last legislature of California, for instance, considered 360 educational bills. These laws changed school conditions, created new commissions, and enlarged the duties and powers of most school officials.

Educational change has come upon us quickly. One can scarcely peek into the pages of school reports or school laws of twenty years ago without being struck by the ludicrous contrast as regards present-day laws and reports.

In this educational reform, the country schools, until but recently, have been almost entirely ignored. They have been shamefully neglected. While our cities have had a remarkable growth in population, the country has lost and is still losing. Secondary education and higher education have gone forth by leaps and bounds under splendid legislation and wise leadership, the registration in the high schools of our land having increased 87 per cent in the fifteen years following 1900. Statistics of one great western state show that the rural school enrollment from 1910 to 1915 decreased annually about 3,000, while the enrollment of the city schools in this state for the same years increased nearly 6,000 per year. There can be no doubt that the past neglect of rural education has sent many of our country folk to the city.

We have too long ignored the great importance of the rural school. We have been sinfully passive; activity for rural betterment has been sporadic or merely local. Where pioneer and praise-worthy work has been done, the merits of such work spread painfully slow. Our strongest men and women have not been found devoting their lives to the problems of the country school.

But evidence is not lacking to show that we are in the very beginning of a great awakening in matters pertaining to rural education. The recent educational legislation of many of our states, such as Ohio, Indiana, Utah and Texas offers the best proof that a new day has dawned for the country schools. In the past our country schools in one decade have been the object of our pity; in another, the object of our pride; in another, ridiculed, then praised, then wofully neglected, and now the rural school is receiving serious thought from the office of the United States Commissioner of Education down to the district board.

But the battle for better rural schools has just begun. The bonds of traditional education have been broken; we are out of the woods at last, and surveying the far-reaching horizon, upon which appear many complex and difficult situations in rural life. Our agricultural people are demanding a better school than the preceding generation had, and in this work, men and women of devotion, of training and of leadership are greatly needed. Commenting upon our rural school situation, Dr. Cubberley

says: "Never before in the history of our educational systems has there been such urgent need for men and women of adequate professional preparation, deep social and professional insight, and large executive skill and personal power."¹ Training teachers for the rural schools, elevating their professional position, and educating rural communities "to the point of demanding a suitable rural education," says Dean Russell of Columbia, "is a great work—probably the greatest educational work ever attempted in this country."²

With this new demand in rural education has come the need of trained teachers, and pro-

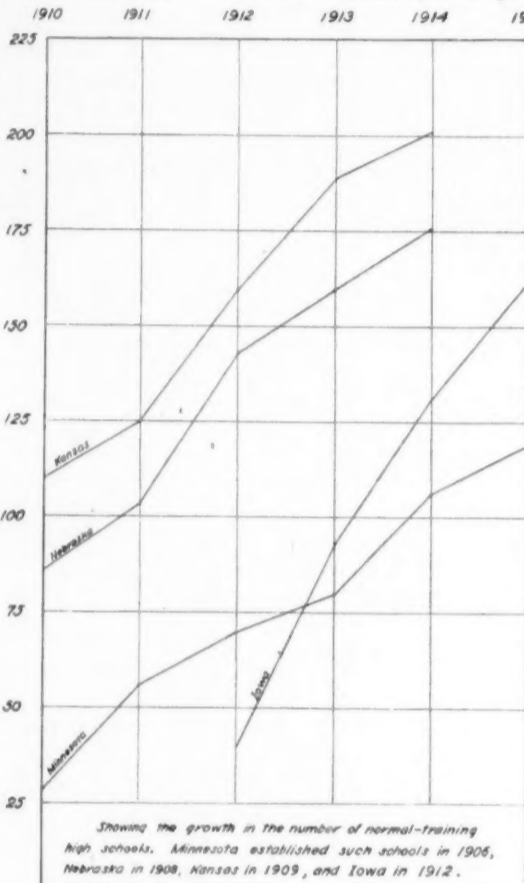


Fig. 1.

visions have been made in several states for the training of rural teachers in the high schools. Such training is usually given in the third and fourth years of the high school course, though in a few states to graduates only. The content of such a training course usually covers: (a) a complete review of the common branches taught in country schools; (b) methods of teaching, school management, pedagogy, and elementary psychology; (c) observation and practice teaching.

In most states this work is taken as part of the regular high school course, and is counted toward graduation. The professional subjects are taught by a special teacher. In at least three states, New York, Michigan and Minnesota the training course is in connection with the high school, but given in a separate department. To the graduates of such training courses, certificates are issued by the state board of education which entitle the holder to teach, as a rule, in any public school of the state.

Extent of Work.

This idea concerning the training of rural teachers in the high schools is not new, though only recently have states become active in such work. In New York state as early as 1834 provisions were made for the establishing of eight academies where common school teachers could

¹National Education Association, 1914, p. 247.
²State and County School Administration, by Cubberley and Elliott, p. 579.

be trained. These schools received yearly \$500 for books and equipment and \$400 for maintenance, and on becoming high schools, many years afterwards, retained their right to train teachers for rural schools. Since 1886, Kansas has had a few high schools that have trained teachers and granted certificates to teach to the graduates of the high school training department. Wisconsin followed suit in 1889, and following 1900, every two or three years, we find states making provisions for the training of rural teachers in the high school. At present more than twenty states provide for such training in the high schools. In these states there are over one thousand high schools having training departments, and these schools graduated 11,088 students in 1914-15 from an enrollment of 25,000³. In 1912, only 634 high schools offered training courses, and the number of graduates from these schools was 4,860.⁴

The increase of high schools offering training courses in most of the states having such high schools, has been very rapid. All states cannot here be reviewed, but some of the most advanced ones in this new work will be noticed.

Nebraska created the high school training department in 1907, and the next year had 69 such schools. In 1914 this state had 176 high schools giving training courses, and enrolling 3,850 students. In 1912 Iowa had forty high schools giving training courses, in 1913, 93 high schools, and in 1914, 131 high schools, enrolling over 2,000 students. In Missouri out of 114 counties, 82 counties have 104 high schools giving training courses, and these schools enrolled 1915 over 2,000 students, of whom 86 per cent were girls; fifty per cent of these students were in classes enrolling from nine to fourteen. Minnesota had in 1910, but 28 high schools offering training, enrolling 489 students, and in May, 1915, it had 119 such schools having an enrollment of 1,417 students of whom only 42 were boys. Kansas has established 201 training high schools in 96 of her 105 counties, and 3,839 students were enrolled in these schools in 1914. Virginia has 23 high schools giving training in as many counties. Wisconsin has 25 high schools, in addition to the 27 county training schools, training teachers, and Arkansas, fourteen such high schools in 1914, enrolling over four hundred students. In one state in 1914, 2,800 graduates of high school normal training courses came forward to take the state examination, and these prospective teachers had devoted more than a year to the problems connected with the rural school, and to methods of teaching.⁵

State Aid.

One of the most interesting facts concerning these normal-training high schools is the state aid given them. The annual appropriations go chiefly for salaries, libraries, equipment, and transportation of pupils where this is necessary. And the most encouraging outlook is found in the increased annual appropriations of the different states.

Florida, one of the three new states last year to authorize the establishing of training classes in high schools, appropriated \$25,000 to assist in organizing one high school having normal training for each county. Each school offering normal training gets \$500 a year, if the county board of education will appropriate an equal amount. In 1914-15, Nebraska increased its appropriation for normal-training high schools from \$100,000 to \$125,000, as did Iowa for the

³U. S. Commissioner of Education's Report, 1915, Vol. I, p. 390.

⁴U. S. Bureau of Education Bulletin, 1913, No. 2, p. 51.

⁵National Education Association, 1914, p. 123.

same year. Kansas for this same year increased its appropriation from \$75,000 to \$100,000. Wisconsin gave to her normal training high schools, in 1914, \$151,000, and Michigan gave for the same year, \$119,000 to her normal training high schools. The largest aid to individual schools is found in Minnesota which provides, under the new school law, for the following appropriations: \$1,200 to every training high school. Those schools with two teachers teaching the special subjects may get not to exceed \$2,000, and those schools employing more than two teachers, and enrolling not less than fifty students may get up to \$2,800. If the Minnesota training high schools enroll the same this year as last, they will get nearly \$150,000 from the state. The annual amount of state aid given high schools having training departments usually runs from \$500 to \$800, with a few schools receiving \$1,000 or more.

Regulation of Schools.

Since these schools are largely kept up by state money, the state board of education, usually selects the high schools that may give normal training, recommends the special teachers, and controls them generally, making the course of study, and examining the graduates.

In Nebraska, which state has about the most extensive regulations governing normal training in high schools, the high schools must be accredited by the state university, be designated by the state superintendent, give normal training only in the third and fourth years, and have at least two teachers, exclusive of the principal and special teacher. There must be a class of ten members, each of whom must take the work for eighteen weeks before state money is given. All normal training students must take elementary agriculture one-half year, and one semester of United States history and at least 72 periods of professional training in the senior year such as school management, methods, observation work and practice teaching, to be given by the city superintendent, or a member of the high school faculty, recommended by the superintendent, and approved by the state superintendent. All grade teachers (where normal training is given in the high school) must have had a training equivalent to the elementary normal course, and two years' experience. To continue on the approved list of schools which secure state aid, the high school "must show a good percentage of normal trained graduates as actual teachers the year following graduation."

In New York the training high schools are directly under the control of the Commissioner of Education. They must have a special teacher, and four recitations per day of 40 minutes each. In Iowa the high school must be an accredited school, and consolidated schools are given preference over township and city schools; there must be a class of ten, and the graduates are given a certificate to teach for two years in any school in the state. In Oregon, elementary agriculture is required; the class must contain eight, and at least this number must be enrolled for the full 32 weeks before state aid can be secured; classes must spend at least one hour per day for 16 weeks in observation and practice teaching.

Graduates.

But what are these normal training high schools doing? How many students do they graduate? Do the graduates teach, and if so, where? To answer these questions with any degree of satisfaction is rather difficult, for not many state school reports say much about the number of graduates who teach, but something has been learned of the number who graduate.

In 1914, Nebraska graduated from her high school training schools 1,750; Iowa gave certificates to teach to 805 young people, in 1915, who had passed thru the high school training de-

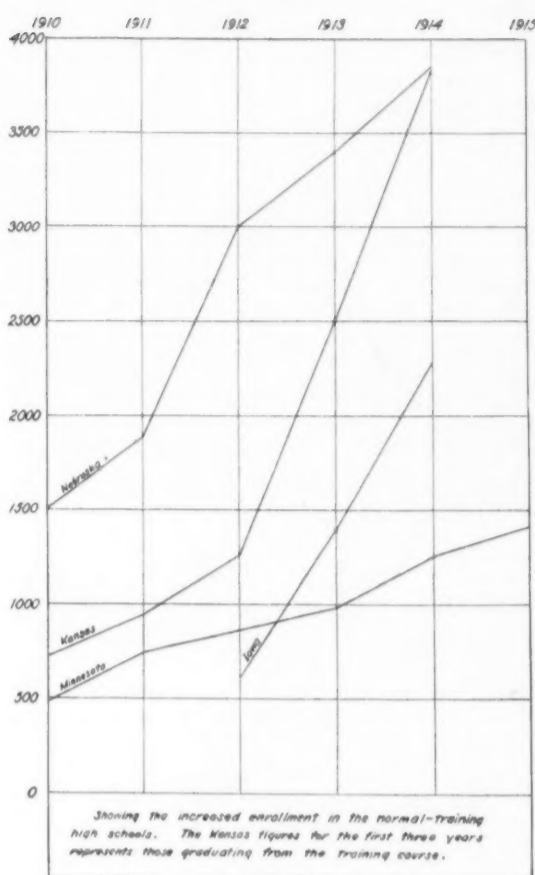


Fig. 2.

partment. Out of an enrollment of 1,417 in the Minnesota training high schools in 1914, all but 99 were given certificates. Michigan has sent 2,100 graduates from her high school training departments into the rural schools, and from her county training schools, which began in 1911, have gone nearly 6,000 teachers, most of whom would never have received any training before beginning to teach, except for these local institutions. In 1914, this state sent from her high school training classes 605 young people to become rural teachers.

In 1914, Missouri graduated from her high school normal classes 628, and the next year 599 of these reported to the state office. Of the number reporting, 416 were teaching, 75 per cent of whom were in one and two room rural schools. In 1915, the number of graduates given certificates was 664 and reports to the state superintendent show that 521 were teaching—83 per cent of whom were in the country schools. The others were reported as follows:⁶

- 42 remained at home, not wishing to teach.
- 34 could not secure positions.
- 17 went to college.
- 15 went to normal schools.
- 15 engaged in other work.
- 10 got married.
- 4 were not heard from.
- 3 became clerks.
- 2 became stenographers.
- 1 died.

⁶Sixty-sixth State Report, pp. 90-91.

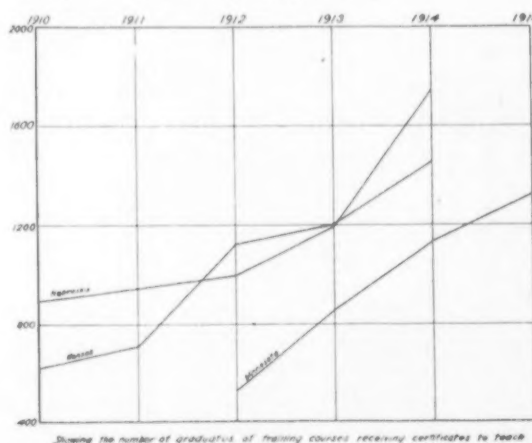


Fig. 3.

As yet we do not have many such reports of the graduates of the high school training classes, but evidence is not wanting, from those in a position to know, to show that the rural teaching force in some places has increased in efficiency and in professional spirit; that salaries have been raised and that the whole general tone of the country schools has been greatly improved, due chiefly to better trained teachers.

Cause of Invasion.

What, now, has been the cause of this invasion of the high school into the professional field? Certainly we may set down as the first cause the failure of the state normal schools to supply trained teachers for the country schools. In 1914, all the normal schools in the United States graduated only 20,000, yet over 100,000 new teachers are needed every year in our system of public schools, and it is well known that the cities and larger towns consume the yearly output of the normal schools.

That our normal schools have thus utterly failed cannot be doubted. Iowa has one state normal school which tries heroically to supply the vacancies left in a teaching force of 27,000 of whom 12,500 are in the rural schools. The six state normal schools of Illinois, in 1914 graduated 622, only a few of whom found their way into the country schools. The state superintendent of this great state reports for 1913-14 that out of 10,240 one-room rural school teachers, but 130 were college graduates and 336 were normal school graduates.⁷ Almost fifty per cent of the teaching force of South Carolina, in 1914, had no training. Says the present state superintendent: "There are literally hundreds of schools in South Carolina taught wholly or in part by teachers who have had but little more education than the pupils they are attempting to teach." He also states that the numerous colleges of his state could not supply the public schools with trained teachers if all the graduates from these institutions were to teach for a period of ten years. The five state normal schools of Missouri graduated less than 1,000 students in 1914, yet this state has nearly 8,000 rural teachers, and needs annually 3,000 new teachers for the rural schools.

In one state, the state superintendent reports that the leading normal school in his state, one of the very strongest in the whole country, had, in 1912, less than 350 of its graduates teaching in the state, after twenty-five years of successful operation. From the Nebraska state school report for 1914, we learn that the 13 private and denominational colleges, the four state normal schools, and the state university were able to supply but 700 teachers with first and second class certificates, and these teachers went for the most part to the towns, yet this state needs annually 4,000 new teachers. Says Superintendent Delzell: "Our normal schools, filled to their capacity, are yet unable to supply a sufficient number of teachers for the grades of the city and town schools."⁸

Thruout the whole list of states the situation is the same—the normal schools are utterly unable to supply a sufficient number of trained teachers for the country schools. We do not have enough normal schools, and those existing have given too little attention to the needs of rural life.

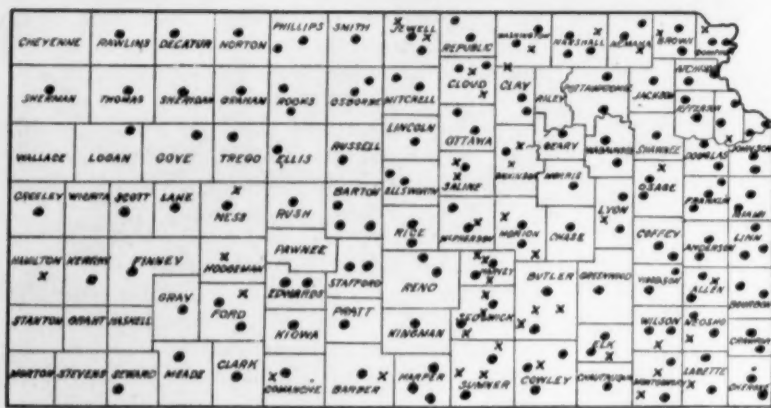
The Advantages of Normal Training High Schools.

(1) A high school having a training class becomes a better high school. In such a school we have a group of young people having a real and definite aim in their education—a desire to do something. Where teachers' training courses

⁷Illinois School Report, 1913-1914, p. 14.

⁸47th An. Rept. State Supt. of Education of South Carolina, p. 181.

⁹Biennial Report of Supt. of Public Instruction of Nebraska, 1913-14, p. 174.



Showing the location of the normal-training high schools of Kansas - 1914

Fig. 4.

are offered in the high school, the course of study becomes stronger, and the whole general tone of the high school is raised. State Superintendent Delzell says: "I know of no one thing that has done so much to raise the standards of our high schools all over the state as the establishment of the normal training work in high schools."¹⁰ State Superintendent Deyoe of Iowa is even more emphatic, for he says: "The high school normal training law has done more in the last three years in transforming courses of study in high schools than any thing that has ever been done in this state. It has meant better buildings, better equipment, better teachers employed and more practical courses of study."¹¹

(2) The training courses bring stronger teachers both in the high school and in the grades. Training teachers must be of high rank. Think of a score or more of eager, young people, impatiently waiting to become teachers, daily observing at first hand, your teaching methods—criticising, judging, comparing, wondering,

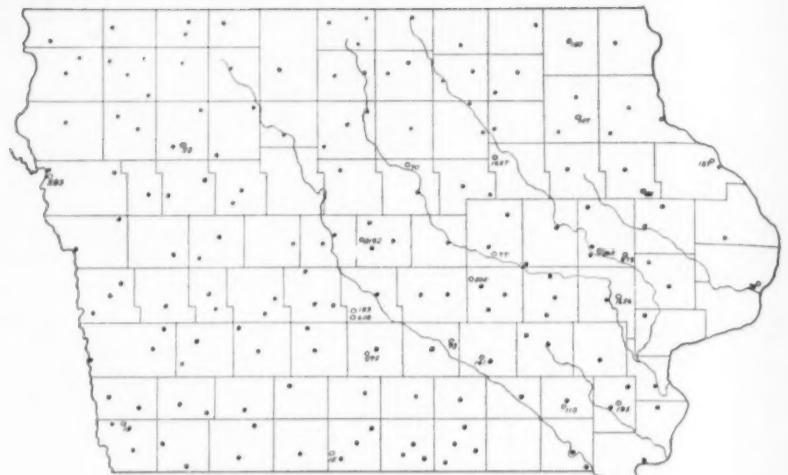
¹⁰Biennial Report, 1913-14, p. 42.

¹¹Biennial Report of the Department of Public Instruction, 1914, p. 15.

speculating and guessing. Much is expected of such teachers for they stand as models. All—the state superintendent, the principal, the superintendent, the school board, the "leading citizen," proud of the local institution, and the thrifty farmer, whose only daughter is about to secure a country school—want to see the teacher teach who is teaching others how to teach. In almost every state school report examined, where high school training is given, mention is made of the better teaching force resulting from establishing such courses.

(3) These training schools bring a greater community interest. Where the regular teacher and the student teachers come and go among the country schools, a better community spirit is bound to grow up. New ideas are carried from school to school and from community to community.

(4) Obviously, such schools offer the only present means of securing a larger number of trained teachers for rural communities. While such training, in many cases, may be inadequate, it most certainly is not to be condemned.



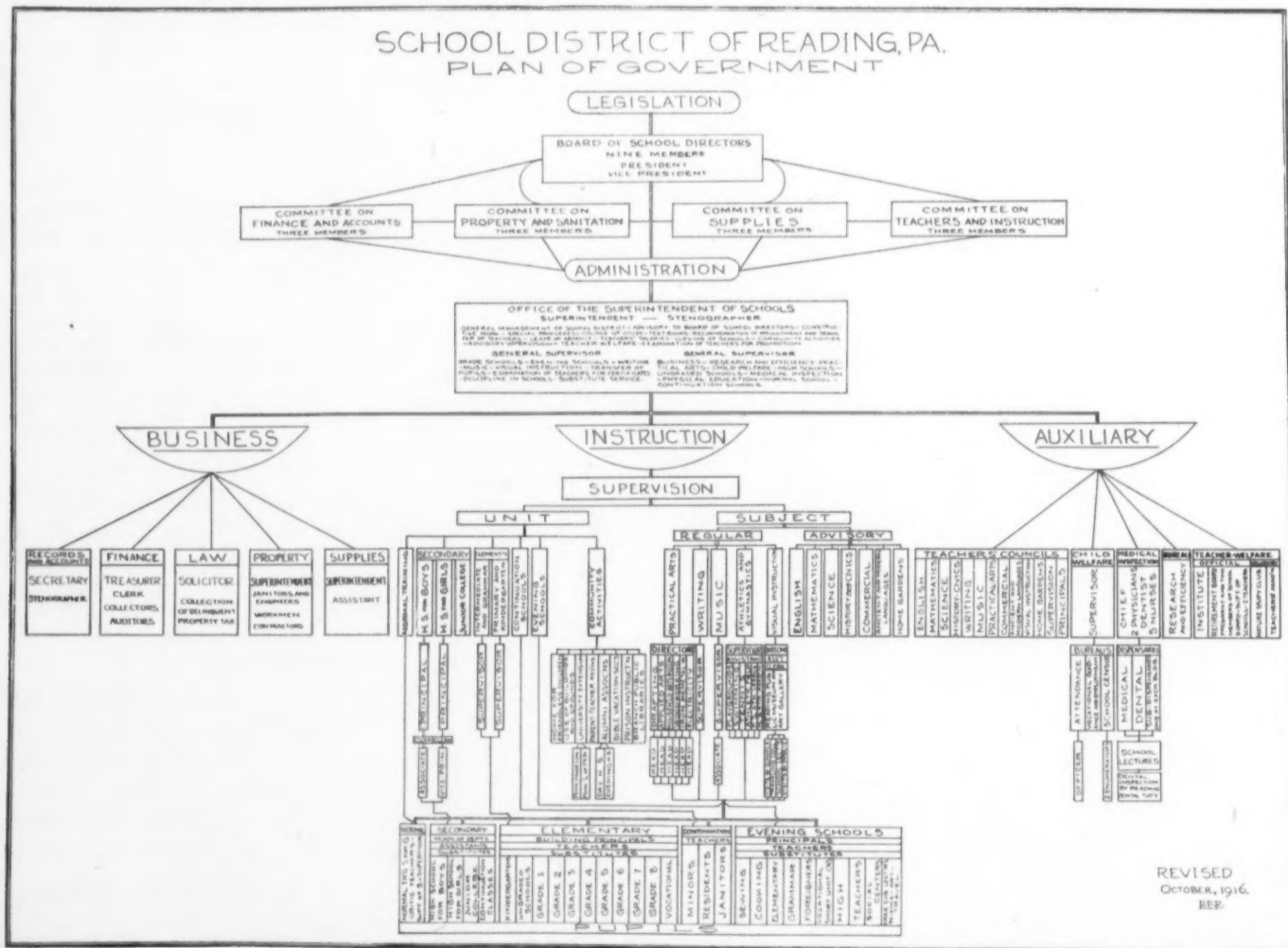
Showing the Normal-Training High Schools of Iowa, and also the colleges of the state with the college enrollment - 1914. The growth of the training high schools in the presence of so many colleges presents an interesting situation

Fig. 5.

Normal schools have not been able, and probably never will be able to train the number of teachers needed. By means of the normal training high schools, thousands of young girls are sent into the rural schools with a year or more of special training, most of whom, without such schools, would never have received a day's training before beginning to teach. State Superintendent Ross of Kansas says: "Within a decade no teacher will be teaching, even in the rural schools of Kansas, who has not had at least a full four year high school course, including special work in normal training."¹²

These high school training courses have answered a long felt need. They have been successful, and it would seem that as long as we have so few normal schools, as long as our state institutions fail to train rural teachers, as long as our country teachers are young, immature girls, and as long as most of the teachers come from the local grammar and high schools, so long must the chief burden of training teachers for the country, fall upon the secondary schools.

¹²Nineteenth Biennial Report of Supt. of Public Instruction, 1913-14, p. 34.



Plan of Organization of the School District of Reading, Pa. Mr. Chas. S. Foss, Superintendent of Schools.



UNION HIGH SCHOOL, REDONDO BEACH, CAL.
Allison & Allison, Architects, Los Angeles, Cal.

THE REDONDO BEACH UNION HIGH SCHOOL.

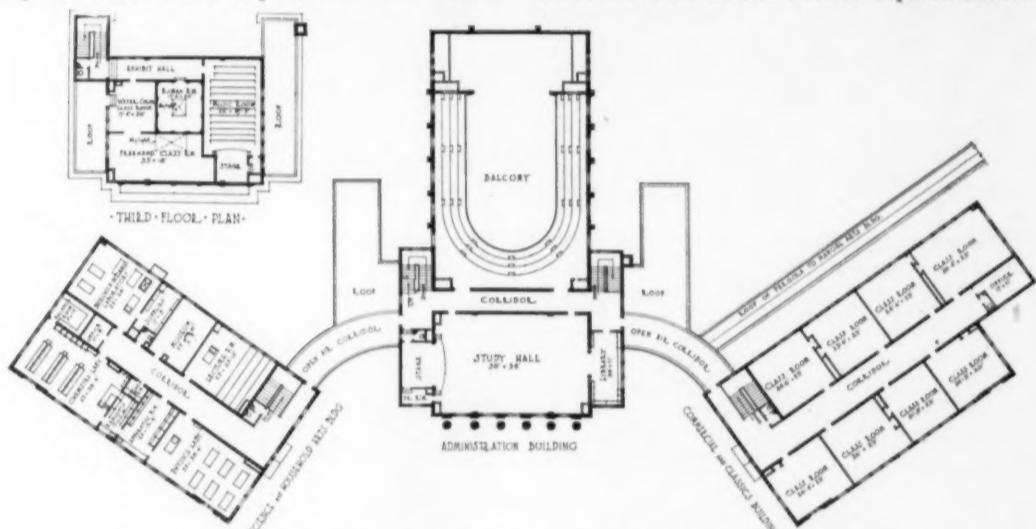
The group includes an administration or central building, a science and household arts building, a building for the commercial and academic classes and manual arts building. A gymnasium is to be erected at a later date to complete the plant.

The central building comprises the administrative offices, the study hall, the auditorium, the art and music departments and lockers and toilet rooms. The auditorium is a splendid room seating one thousand persons. It has a fully equipped stage adapted for theatricals as well as lectures and school entertainments. The study hall, which seats 200 students, is equipped with a platform and has adjoining an alcove for the school library. The music room on the third floor seats 130 and serves for meetings of the student societies. The two drawing rooms on this floor have top lighting as well as windows and adjoin so that one teacher may supervise both. A Roman room is designed and furnished in true Roman style. It is used for the ancient language classes and creates a classic atmosphere that is remarkably effective.

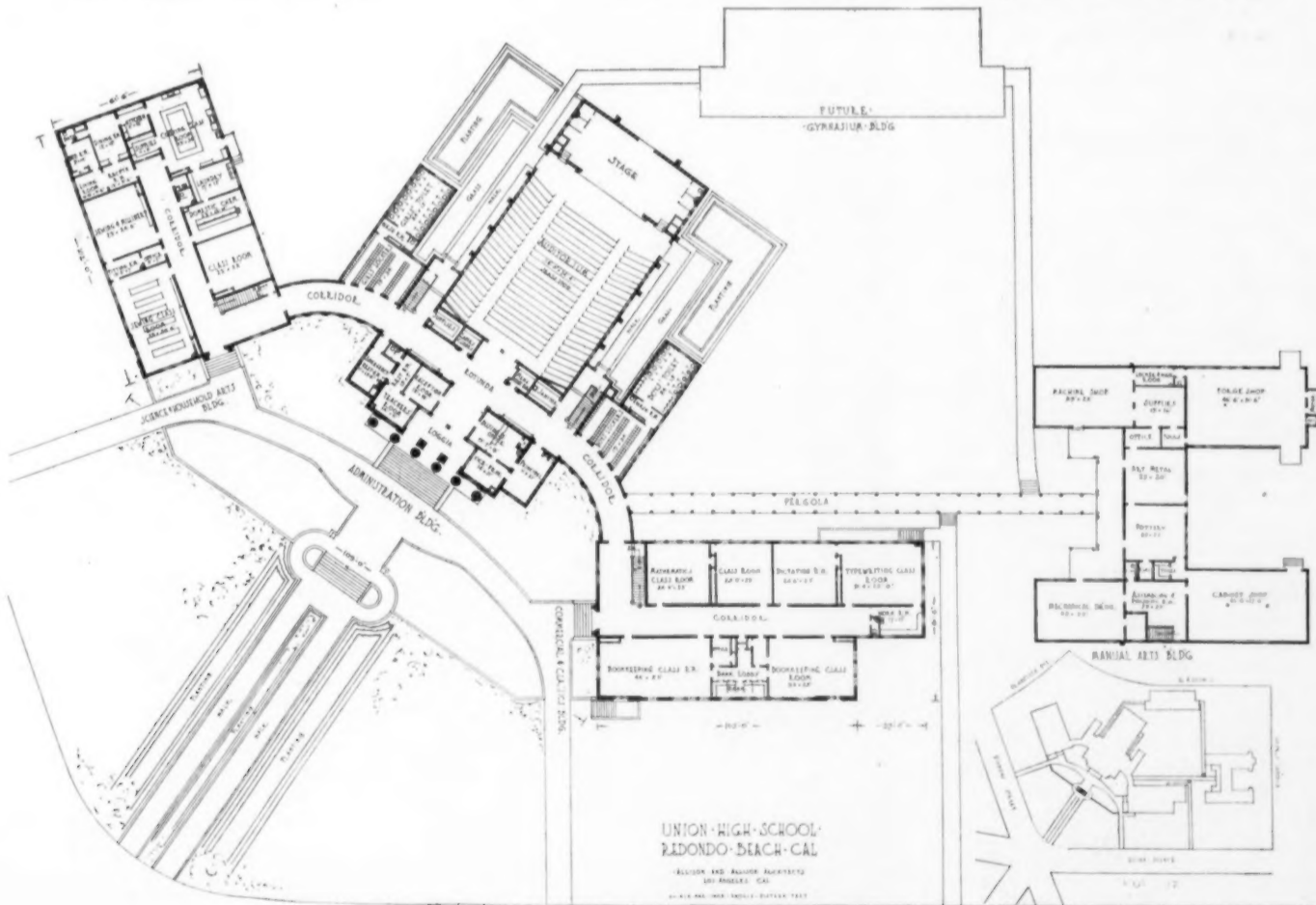
The domestic science department occupies the

first floor of the household arts and science building. The department includes rooms for cooking, sewing and millinery, a laundry and a complete model flat for practice. The labora-

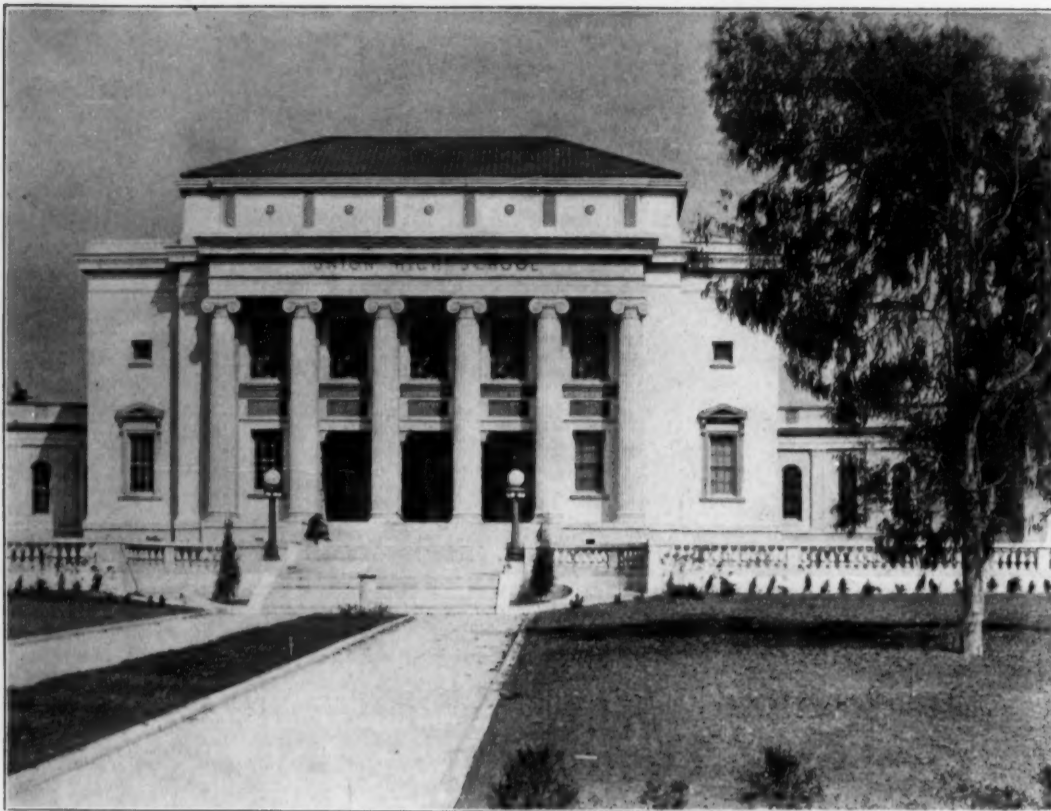
tories on the second floor are completely equipped for botany and biology, physics and chemistry. A lecture room is shared by the three divisions of the science department and a



Second and Third Floor Plans of the Union High School, Redondo Beach, Cal.



FIRST FLOOR PLAN, UNION HIGH SCHOOL, REDONDO BEACH, CAL.
Allison & Allison, Architects, Los Angeles, Cal.



ADMINISTRATION BUILDING, UNION HIGH SCHOOL, REDONDO BEACH, CAL.
Allison & Allison, Architects, Los Angeles, Cal.

museum is provided for a collection of specimens.

The science and classics building is similar to the science building in arrangement and size. The business department is grouped on the first floor and eight classrooms are located on the second floor. A complete cafeteria is located in the basement. The dining room seats 200 and the kitchen is adequate for quick service. The contour of the site has been taken advantage of in arranging these rooms so that they are well out of the ground, well lighted and ventilated.

The fourth building of the group is an old structure originally intended for the domestic science department. It has been remodeled for manual training and conforms architecturally to the main buildings. It is one-story high and accommodates metal shops, a pottery room, a woodworking shop, a finishing room and a drafting room. A portion of the building is used at present for gymnasium purposes.

The three main buildings are connected by one-story covered cloisters as shown in the sketch. These cloisters also connect the second stories of the three buildings by open-air roof-garden corridors. A covered pergola connects with the corridors of the main building leading to the manual arts building, so that it is possible to reach all buildings under cover in bad weather.

The buildings are built with concrete foundations, brick walls with cement exterior finish, and burned clay tile roofs. All exterior trim, including the large columns and portico and entrances are of cast stone, the large columns being cast in monolith.

The heating apparatus is located under the south wing of the main building. Low pressure steam is used as a medium of heat, and a plenum room and motor driven fan for ventilating is placed in each building, supplied with steam from the central plant.

All of the fresh air delivered thruout the buildings is first drawn thru the latest type of water spray air washers, removing 95 per cent of the dust and impurities from the air before it is delivered into the rooms. The temperature in each room is regulated by thermostats, maintaining a uniform temperature within two degrees without any attention from the teachers. Humidostats are also provided, controlling the humidity of the air.

The plant is one of the most modern and complete of any school in the State.

Vacuum cleaning system is installed for

cleaning. A program clock and bell system is installed. A complete inter-communicating telephone system, with instruments in all rooms connecting with the main operator's switchboard set located in the business office is provided.



NEW HIGH SCHOOL, WEST SPRINGFIELD, MASS.
Malcolm B. Harding, Architect, Westfield, Mass.

A seven thousand dollar pipe organ is installed in the auditorium over the stage, and an echo organ and chimes are located in the rear of auditorium.

All floors are covered with cork carpet. All classrooms are provided with genuine slate blackboards.

The building cost complete \$150,000.00.

Allison and Allison of Los Angeles were the Architects.

A COMMUNITY HIGH SCHOOL BUILDING.

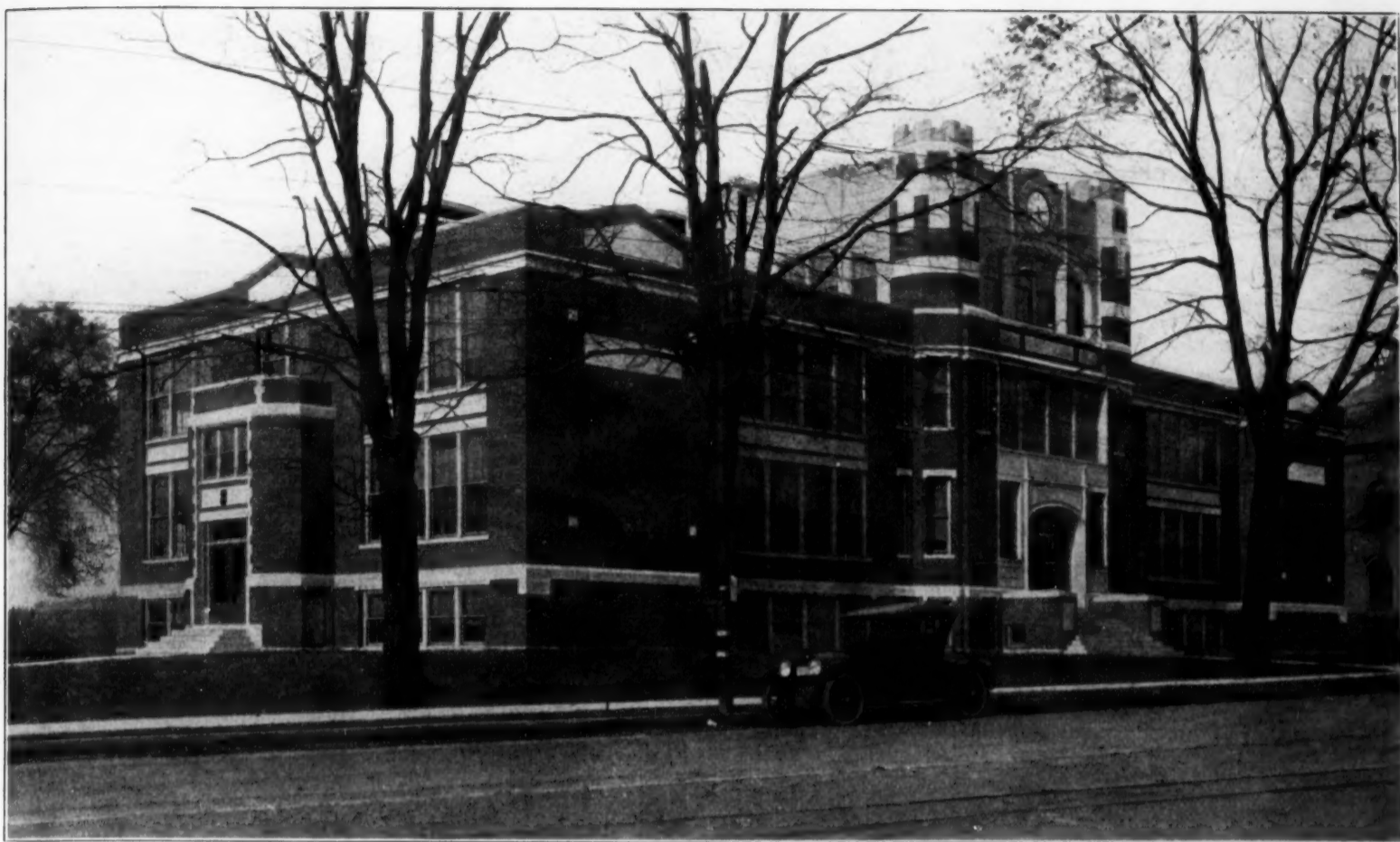
Small cities are understanding more and more that the high school building, if properly arranged, may become the community's most useful public structure which the greatest number of citizens can enjoy. An interesting community high school that serves a wide variety of purposes is the new High School at West Springfield, Mass. The building was completed in November and put into service about December 1st. It was designed by Mr. Malcolm B. Harding of Westfield, Mass.

The basement of the building is given up almost entirely to the physical education department and service rooms. The gymnasium is equipped with a gallery for spectators, two large locker and shower rooms are provided, and some space is devoted to lunch rooms and to the domestic science department.

On the first floor there are six classrooms, a library, a large study hall, and the offices of the school.

The auditorium is entered from the first floor. The room has a seating capacity for 650 and is equipped with a large stage, a booth for projecting motion pictures, dressing rooms, etc. It is planned that the room will be used for general assemblies of the school and as a meeting place for local clubs, civic organizations, etc.

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NEW HIGH SCHOOL, WEST SPRINGFIELD, MASS.
Malcolm B. Harding, Architect, Westfield, Mass.

On the second floor there are a study hall, four classrooms, a commercial room and a drawing room.

The central section of the building is carried up to a third floor in which are placed the physics and chemistry laboratories, a science lecture room and a classroom. The lecture room will be used not only for science demonstrations, but also for singing classes, etc.

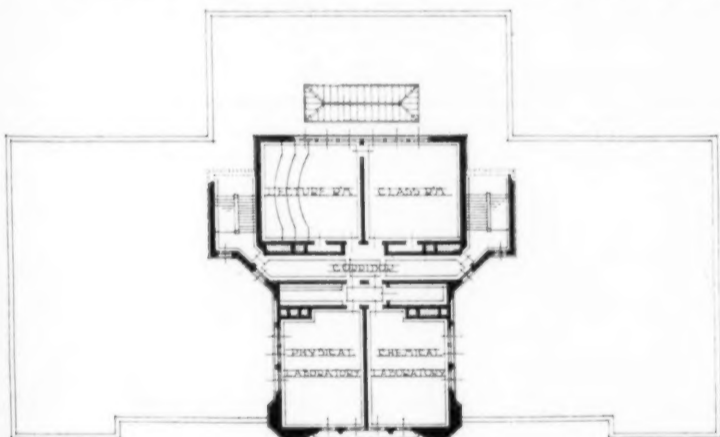
The building is arranged to accommodate 600

pupils and the school which it houses is organized on the standard study hall-classroom plan.

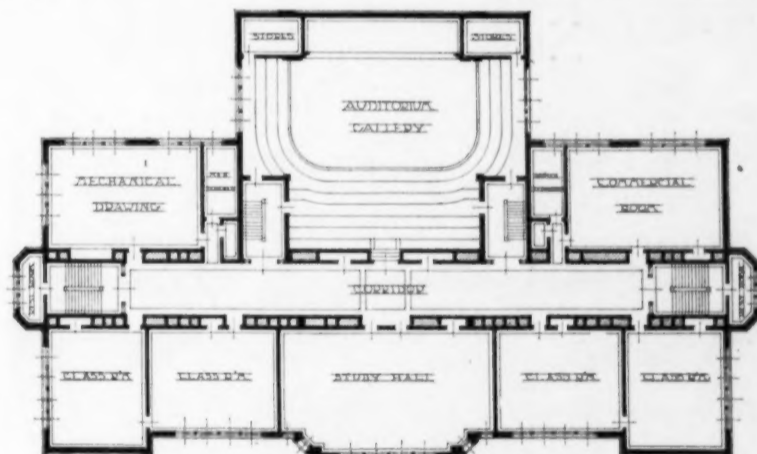
The construction is semi-fireproof. The exterior is splendidly finished with tapestry brick and Indiana limestone trimmings. The interior walls are of brick and the corridors and stairways are concrete with marble and terrazzo finish floors. The stairways are of iron. The classrooms are finished in brown ash and have maple floors of the best quality.

The building is ventilated by a mechanical system operated from two air chambers at either end of the basement corridor. The air is forced thru vento raditors by means of fans driven by 5 H. P. motors. Direct steam radiation is provided in each classroom by means of wall radiators. The entire system is under thermostatic control and the steam is produced by two 70 H. P. tubular boilers.

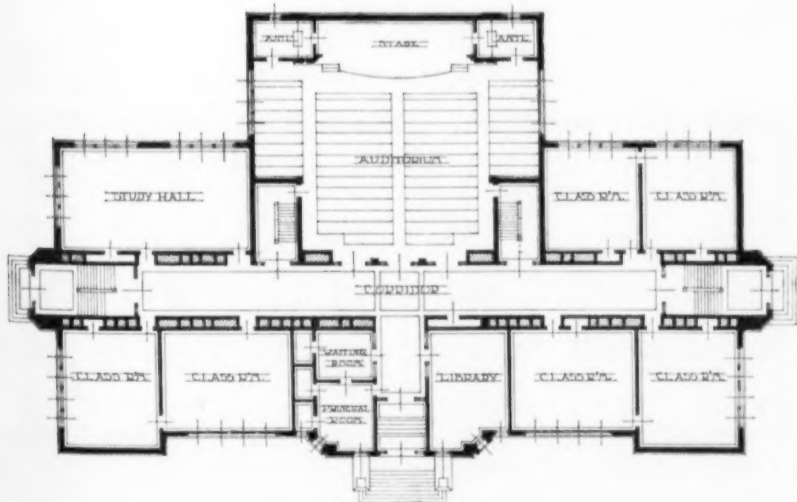
The building is equipped with standard de-



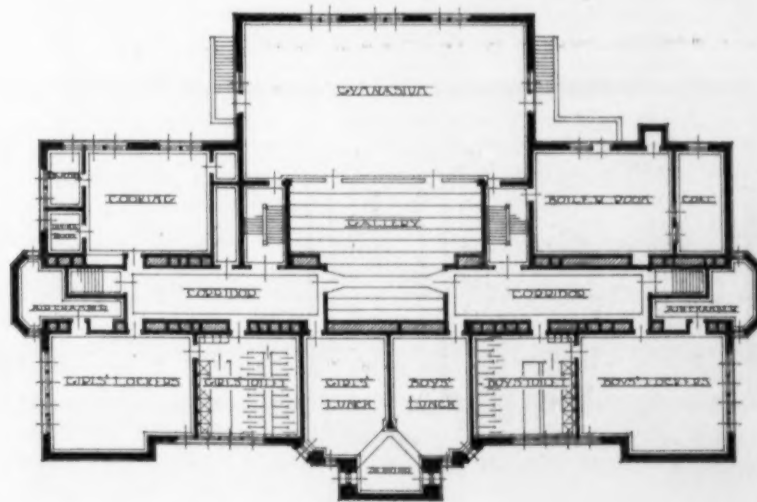
Third Floor Plan.



Second Floor Plan.



First Floor Plan.



Basement Plan.

vices for time and program systems, intercommunicating telephones, an automatic fire alarm and vacuum cleaning. Standpipe hose and reels are provided for each floor.

The building contains over 700,000 cubic feet and was built complete without equipment for \$94,000.

THE CHARLESWOOD SCHOOL.

The Charleswood School is located in the village of Charleswood on the east side of the Assiniboine River about six miles from the city of Winnipeg. The building is finished with red brick and stone and has a gray asbestos slate roof.

On each of the two floors are situated two well lighted classrooms with cloakrooms adjoining. The windows are so situated that neither the pupils nor the teachers are compelled to face them. The windows are provided with Holland shades so that the direct rays of the sun may be excluded without reducing the necessary minimum of light for comfortable work.

A library is located adjoining the main stairway a few steps above the level of the second floor. Below the library on the landing of the stairs between the first and second floors there is a small room which serves as a meeting place for trustees and for the teachers.

Entrances to the building are at the grade line, and at each side of the vestibules stairs lead to the basement. The floors of the basement corridor and of the playrooms have been laid in blocks of concrete four feet square so that if any accident should occur a block can be easily removed without cutting. The floors have been painted with a concrete paint to keep down the dust and to prevent wear.

The building is of ordinary construction, but the walls and the ceiling over the furnace room are fireproof. Metal lath has been used thruout.

The interior finish of the building is fir in natural finish. The floors and stairs are of maple. The outside doors are equipped with panic latches. Fire alarm detectors have been placed in different parts of the building and a fire escape is situated at the rear.

The heating plant consists of two warm air furnaces which have given good satisfaction in the severest weather.

The cost of the building was nearly \$16,000.

THE NEW RICHMOND SCHOOL BUILDING.

The new Grade School building at New Richmond, Wis., which was dedicated on November 24, 1916, and for which contracts were let on July 7, 1916, is built along lines which make the structure a radical departure from the traditional type of schoolhouse. It is a one-story building with a combined auditorium and gymnasium in the center which also serves as a playroom for the little folks in extremely cold or inclement weather. The building was designed by Architects Volkman & Hancock of Eau Claire, Wis., and was erected by Farnum Brothers of Minneapolis, Minn.

The extreme dimensions of the building are 107 by 112 feet. Except for an excavation of 20 by 20 feet for the heater and fan room the building has no basement. It contains six grade rooms each designed to seat 40 to 45 pupils, a supply room 9 by 19 feet, a teachers'



CHARLESWOOD VILLAGE SCHOOL, CHARLESWOOD, MAN.
E. D. Tuttle, Esq., Architect, Winnipeg, Man.

rest room 9 by 19 feet, two shower rooms, two toilets and six cloakrooms.

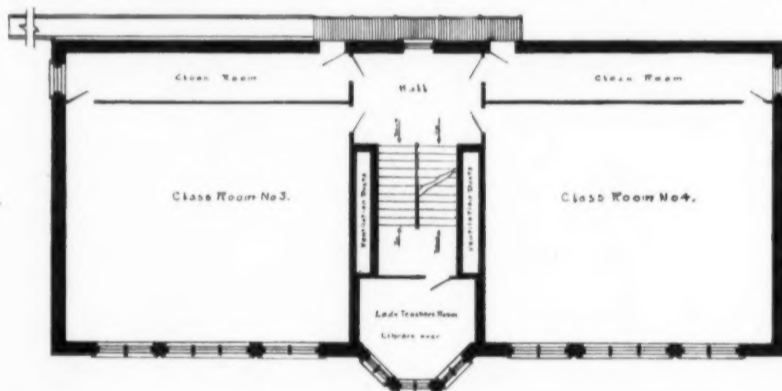
The corridor which is 3 feet 6 inches above the gymnasium floor is separated from the latter by a heavy oak railing 32 inches high. The corridor is eight feet wide and extends around the interior of the building for a continuous distance of 210 feet. The arrangement is such that one teacher may supervise the passing of all the classes. On either side of the gymnasium the corridor offers an ideal space for basket ball, gymnastic drills. It also offers seating space for an overflow audience.

The auditorium or gymnasium is entered by means of two inclines from the rear and two

stairways on either side of the stage. The room has a level floor and is seated with movable opera chairs. It will easily accommodate 600. The stage measures 14 by 30 feet and has an opening 18 feet 6 inches.

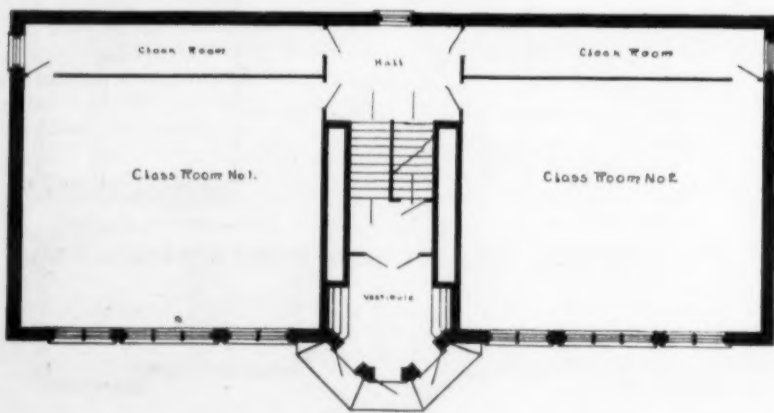
Especially attention has been given in the classrooms to the lighting. The proportion of glass surface to floor surface in the classroom is 1 to 4.3; in the cloakrooms the proportion is 1 to 4, in the auditorium it is 1 to 6 $\frac{1}{4}$, while in the toilets it is 1 to 3.

The building is heated by a direct-indirect steam system and derives its power from a central plant. Each classroom has direct radiation and a sufficient quantity of fresh, warm air is

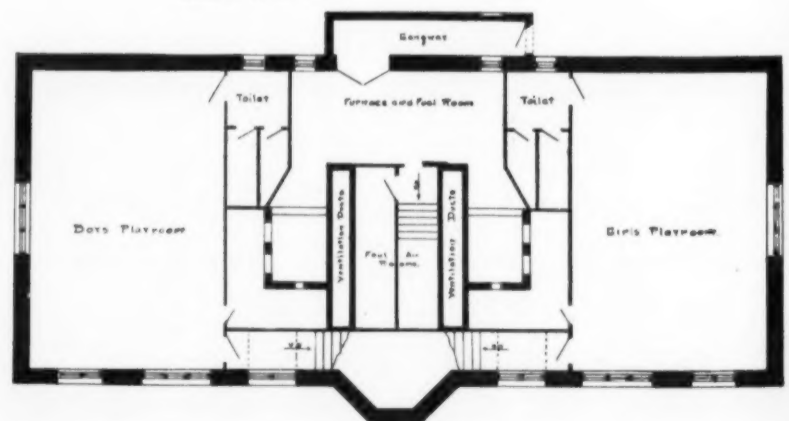


Second Floor Plan.
Scale 1/8" = 1'-0"

Second Floor Plan.



First Floor Plan.



Basement Plan.

FLOOR PLANS OF THE CHARLESWOOD SCHOOL.



NEW GRADE SCHOOL BUILDING, NEW RICHMOND, WIS.
Volkman & Hancock, Architects, Eau Claire, Wis.

supplied at the rate of 30 cubic feet per minute per child. The fresh air is introduced at a point eight feet above the floor and is drawn out thru flues located in the cloakrooms.

The plumbing is of the best school type, and all the toilets and wash bowls and other fixtures are of porcelain and marble.

The building is finished thruout in oak trim. The furniture, shades, the stage curtain, etc., have been designed and finished to harmonize with the wood trim.

The exterior of the building is of rough brick and stone with tile trim. The interior walls are of brick and tile and the foundations and under floors are of cement.

The building cost \$25,500 including heating, plumbing and wiring.

The school authorities of New Richmond consider the building an achievement in that it provides six splendid grade rooms, an adequate gymnasium and the best auditorium in the community.

EDUCATION IN 1916.

There were 23,500,000 persons attending schools of some kind in the United States in 1916, according to estimates of the United States Bureau of Education. "This means," declares the annual report of the Commissioner of Education, "that approximately 24 per cent of the inhabitants of the United States are attending school, as compared with nineteen per cent in Great Britain, seventeen per cent in France, twenty per cent in Germany, and a little over four per cent in Russia." The Bureau points out, however, that the result is much less favorable to the United States if daily attendance rather than enrollment, is taken as the basis for comparison, since some of the other nations have better attendance and a longer school term than the United States.

The number of pupils in public kindergarten and elementary schools rose from 16,900,000 in 1910 to 17,935,000 in 1914, an increase of more than a million in four years. In the same period the number of public high school students increased from 915,000 to 1,219,000; and for 1915 the corresponding figure was 1,329,000. As the result of this increase of 110,000 in public high school students, the total number of students in the 14,000 high schools of all kinds increased to a million and a half. Of the 11,674 public high schools reported, 8,440 had full four-year courses. Approximately 93 per cent of all public high school students are in four-year high schools.

The report analyzes the number of teachers in the United States, showing that of the 706,000 teachers, 169,000 were men and 537,000 women. The number of men teachers has increased very

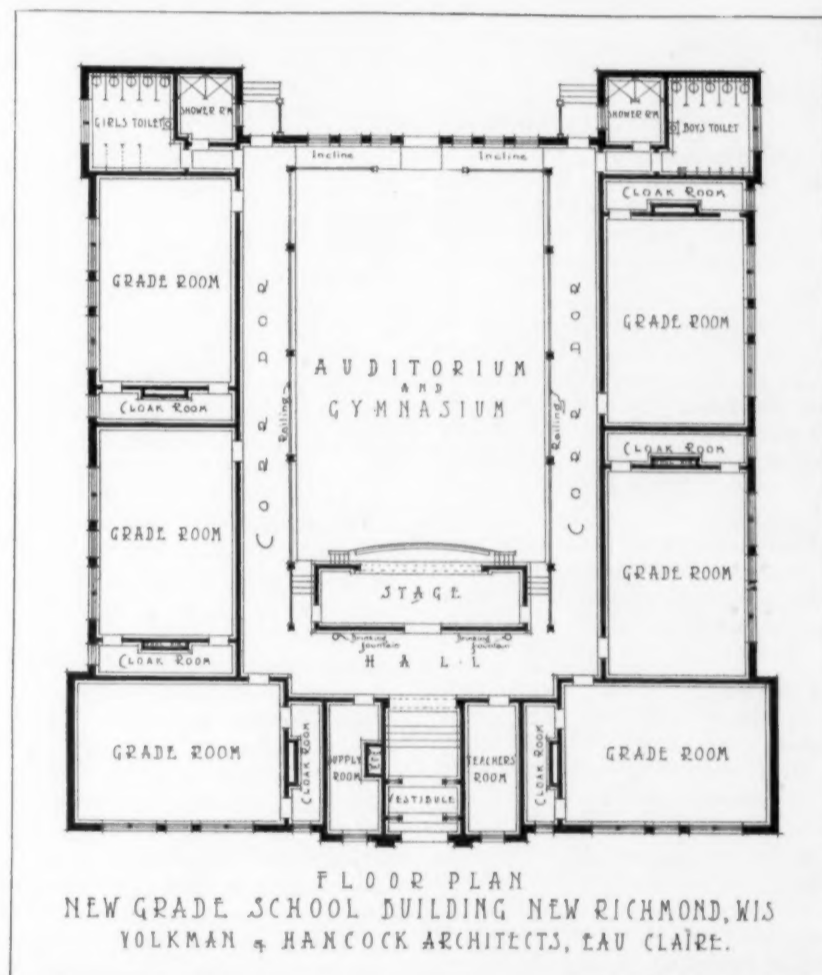
slightly since 1900; the number of women teachers has almost doubled. In public elementary schools the number of men teachers has decreased twenty per cent since 1900, while the number of women teachers has increased eight per cent. In 1900 teaching positions in public high schools were evenly divided between men and women. At the present time women outnumber the men by 8,000. The average annual salary of all teachers is \$525. The figure is highest in the East and North Atlantic States, with \$699 and \$696, respectively, and lowest in the South Atlantic States (\$329). It varies from \$234 in Mississippi to \$871 in California, and \$941 in New York.

Cost of Education.

Expenditures for education in 1914, partly estimated, totaled close to \$800,000,000. An estimate making due allowance for the intervening

two years and for items necessarily omitted, would easily bring the nation's current educational expenditure to a billion dollars. Public elementary schools cost in 1915 approximately \$500,000,000; public high schools, \$70,000,000; private elementary schools, \$52,000,000; private secondary schools, \$15,000,000; universities, colleges, and professional schools, \$100,000,000; normal schools, \$15,000,000.

Of the \$555,077,146 actually reported for public schools in 1914, \$398,511,104 was by the North Atlantic and North Central States; New York expended \$66,000,000; Pennsylvania, \$52,000,000; Illinois, \$39,007,314; Ohio, \$35,172,950; California, \$26,579,804; Massachusetts, \$25,492,292; and New Jersey, \$23,284,096. Six states, New Hampshire, Vermont, Delaware, Wyoming, New Mexico and Nevada, expended less than \$2,000,000.



THE AMERICAN School Board Journal

DEVOTED TO
Legislative and Executive School Officials
WILLIAM C. BRUCE, Editor

EDITORIAL

ON TO KANSAS CITY.

(Reprinted, by request, from the January Journal.)

Of all the tasks that fall to the lot of the Journal's editor, none is more grateful than the annual preparation of a call for the meeting of the Department of Superintendence. For of all conventions educational and otherwise, there is none which in our observation is more purposeful or more effective; none brings together a more earnest and eager group of workers; none is more genuinely influential in shaping the administration, the curricula and the general policies of our American schools and none is more potent a force in upbuilding the schools and thru them our future generations.

The convention of 1917 will go to Kansas City, the progressive center of the Southcentral section of the Mississippi Valley. The city has a unique school system, built up by the efforts of a stalwart pioneer schoolmaster, J. M. Greenwood. More unique experiments have been successfully inaugurated in Kansas City than in any community of double its size. Visitors will be particularly impressed with its plans for industrial education, its research bureau, its health work, its seven-grade elementary courses, its schoolhouses.

But Kansas City and its schools are only the setting for the convention itself. If the word of the officers of the Department may be relied upon the program will be broad in scope and important in subject matter. Such topics as the junior high school, the reorganization of secondary education, economy of time, standard tests, rural supervision will be among the leading topics for addresses and round table discussions. The Department invariably brings out the best men for papers; in fact the choice of speakers is difficult because of the desire of the big men to take part.

The conventions of the Department of Superintendence have one characteristic that is unique. They benefit not so much the persons who attend as the school systems which these persons represent. The reason is that the good things which are brought back are usually so practical and applicable to city schools that they are readily translated into practice and incorporated into the school systems. School boards who send their superintendents are not really incurring an expense. They are rather making an investment for better administration. The members may well ask themselves whether they can afford not to send their superintendents.

MODEL SCHOOL BOARD RULES.

On another page of this issue we reprint in their entirety, the rules and regulations of the school board at Aberdeen, S. D., adopted a few months ago. The rules deserve more than passing attention because they exemplify some of the best thought on educational administration as applied to the small city.

It will be noted that the rules are extremely brief so that anyone can grasp their content in one or two readings. The rules cover only such essential matters as are likely to require permanent regulation, and temporary conditions such as are likely to arise and to vary from time to time are left for action by the board thru resolutions of temporary effect. The functions and relations of the board and the superintend-

ent are clearly defined; the former limits itself to general direction of the schools and the establishment of general policies, while the latter is made the chief executive with power to initiate all educational changes. The arrangement is similar to the frequently quoted situation in industrial corporations in which a manager conducts the business and the directors simply direct. It should be noted that the superintendent's clerk is also secretary of the board so that the former is executive officer of the schools for its entire business—professional and financial.

Most school board manuals contain collections of miscellaneous rules that have been made at some date in the dim past and that have been patched up and added to from year to year as the fancy and anxiety of the board members to confuse matters, have dictated. As a whole, very few school-board codes are a credit to the present boards. They rather exhibit a blind clinging to tradition, a complacent desire to leave well enough alone, and a lack of energetic initiative that will ruthlessly prune away the clumsy dead-letter that has come down from another day. Too frequently the mass of confusing and contradictory rules and regulations conceal handy weapons for slaying progress and for cowering the over-progressive superintendent and teacher and the hopeful newcomer on the board who is set upon "cleaning up things."

School board rules deserve quite generally thoro revisions to meet present-day conditions and practices in school administration. They deserve to be cut to the bare essentials so that the widest freedom and the most prompt action is possible—for school progress. Like a mechanic's tools they should be kept keen and clean and of the latest pattern.

HELD TO BE PROFESSIONAL SERVICE.

That the preparation of plans for a school building involves a professional and expert service and should not be subject to competitive bids as required by the law controlling expenditures for buildings, is the substance of a recent opinion of Mr. S. M. Brewster, attorney general for the state of Kansas. The opinion very correctly recognizes the nature of an architect's service and exempts it from provisions of a law which is clearly intended to control the making of contracts for actual construction work.

The question arose in Neodesha where the board of education employed an architect on the merit of ability as an expert in schoolhouse planning. The matter was not submitted to sealed bids, but a resolution appointing the architect was passed and a written contract was made with him. The procedure was objected to by certain persons on the ground that it violated the Kansas School Laws relative to expenditures and contracts which declare that no contract involving an expense of \$500 for the purpose of erecting a public building or making any improvements shall be let except upon sealed proposals and to the lowest responsible bidder. Local attorneys were unable to find any decision on record on the subject and apparently the question had not been tested in the courts.

The problem was accordingly submitted to Attorney General Brewster. His opinion which is concurred in by Mr. W. D. Ross, State Superintendent of Public Instruction for Kansas, concludes as follows:

"I do not think that it is necessary for the board of education of Neodesha to let the contract of drafting plans for a school building to an architect on the basis of competitive bids. The work of the architect may or may not be paid for out of the money derived from an issue of bonds, but the professional work of an architect in drafting plans for the construction of such a building necessarily must be done before

the contract for the construction of the building can be let, and is of such professional and expert nature that it is impracticable to let that work at a competitive bidding."

PLOTTING AND PLOTTING.

Teachers and school-board members in several states are being taken to task for actively promoting legislation which they believe will aid the schools. There are charges of plotting and connivance, and even harsher words are used to characterize activities which, in our opinion, are not only proper but necessary. It is fit that well meaning critics, and others, remember that school officers and teachers are closer to school affairs than any other class of citizens and that their knowledge of evils and abuses is intimate. It is well to remember, also, that the motives of schoolmen are the best and that excepting a few negligible self seekers, the ends which they seek are the good of the children—the welfare of the state. It is finally necessary to consider that schoolmen know from experience that legislators, and the people generally are not as interested in school matters as they should be, and that without considerable pushing school legislation will be "pigeon holed" or lost in committee without the active interest of the educational forces.

The great mass of criticism on the point discussed comes from political sources and from newspapers which are in sympathy with the politicians. It should be evaluated with its origin in mind.

FEDERAL AID TO BE A FACT.

As we are going to press, the Smith and Hughes bills for federal aid to vocational education require only the joint approval of the Senate and the House to adjust minor differences, and it may be confidently predicted that the law will be a fact on July first next. Educators who have worked for nine years to obtain the recognition of industrial education thru federal aid, see in the new law, the realization of an ambition that is to create a new era in American schools.

In both bills, the amount appropriated for the first year is \$1,700,000 and a greater fund is authorized for each succeeding year until an annual total of \$7,200,000 is reached nine years hence.

Administration of the system is to be under a federal board, and in order to participate in the distribution each state must appropriate an amount equal to the federal allotment to it, and must create a state board to co-operate with the federal officials in co-ordinating the work. No teachers employed under the act may be placed in any school not under public control or which does not provide day and evening classes for persons more than 14 years old.

Of the original appropriation \$500,000 must be used for salaries of teachers of agricultural trades, distributed to the states according to their rural population; \$500,000 for the salaries of teachers of industrial trades, distributed according to urban population; \$500,000 for training teachers of these two classes and \$200,000 to pay the salaries and expenses of the administering board.

The teachers' salary appropriation is to be increased \$250,000 annually for each class until 1924-25 when the annual fund will be \$3,000,000 for employment of agricultural and a like amount for industrial instructors. The fund for training teachers will reach its maximum of \$1,000,000 in 1919-20 and the \$200,000 annual appropriation for the governing board would remain stationary.

The successful passage of the bills is to be credited almost wholly to the National Society for the Promotion of Industrial Education,

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which thru its officers and members has fought for the bills for nine years. Unless every sign fails the law will compel all the states to act in providing a start toward universal vocational training.

GOOD FAITH IN SCHOOL ADMINISTRATION.

In any public or private business good faith is an important asset. Both moral as well as legal obligations deserve serious attention and must be met without quibbling or question.

School board members are occasionally inclined to think that only legal obligations must be met by public bodies. This is particularly true of boards who are elected to carry out a new policy either of reform or of retrenchment. School boards are continuous public bodies and changes in membership do not affect their entity or their obligations. To be specific, school boards which succeed preceding bodies are under serious obligations to carry out the promises of these bodies, particularly when they relate to salaries or building contracts.

It is not too much to ask that school boards shall make good when morally possible and that they shall give a good example both to the community, and to the children of the community, in meeting every proper obligation and promise which they incur.

THE MASSACHUSETTS SCHOOL BOARD CONFERENCES.

Massachusetts has given another splendid example of efficient state assistance to local communities in the conferences for school board members, which Mr. F. G. Wadsworth of the State Board of Education has recently held.

In all, Mr. Wadsworth arranged eleven meetings in as many centers and brought together practically all the school boards of the state to discuss the powers and duties of school boards, the improvement of supervision and instruction and the transportation of pupils.

Conventions of school board members have come to be a potent factor in improving school conditions by removing obstacles to efficient administration and supervision. In practically all states such conventions are held under the auspices of the state department of education or the county superintendent of schools and are permitted or required by the state school laws. The great defect which most of the conventions have had, has been the inclination of board members to put very few of the suggestions and methods for better administration into effect.

In Massachusetts, Mr. Wadsworth has forseen and met this condition by obtaining only the most forceful speakers, and by limiting their addresses to practical, immediately applicable proposals for school improvement. In addition he distributed at each conference a pamphlet outlining accepted practices and procedures for school committees, superintendents and teachers. The pamphlet was intended to supplement the discussions of the powers, duties and responsibilities of school boards and makes clear in very brief form the chief legal requirements for the Massachusetts schools. It also emphasizes the need of professional control of the schools. It has been found that the pamphlet is a constant guide and that it continues the good effects of the conferences thruout the year.

The effects of the school board conferences in Massachusetts have been visible thruout the state particularly in the rural towns. Perhaps the best results have been in the better recognition of the prerogatives and functions of superintendents and teachers.

DR. SPAULDING TO CLEVELAND.

Press reports indicate that the Cleveland Board of Education has elected Dr. Frank E. Spaulding of Minneapolis as superintendent of

schools for a term of four years. The election followed a nation wide search for the best available educator. The board had adopted the novel plan of calling upon 25 men who are widely acquainted with superintendents and with educational conditions each to nominate five or six of the strongest men for the office. In all, 76 men were recommended to the board and 22 were named from three to fourteen times. The board then investigated by correspondence, records and present work of the 22 most prominent men and finally sent a committee of three to visit five or six to whom the choice had narrowed. The result was that Dr. Spaulding was tendered the office for a term of four years at a salary of \$12,000. Thruout the negotiations the members of the board exhibited perfect unanimity. They openly declared that they were seeking the strongest, scientific administrator who could be found, and that no extraneous consideration would influence their action.

In coming to Cleveland, Dr. Spaulding will find a wonderful opportunity for service. The school board is a unit for progressive administration; a complete analysis of the situation is at hand in the form of the survey conducted by Dr. L. P. Ayres; public opinion is strong for an adequate school system; and the press is favorable and sympathetic. Dr. Spaulding has amply demonstrated in the two and a half years at Minneapolis that he is not only eminently scientific in his theories and methods, but that he is capable of handling the situation in a large city with many opposing elements and conflicting interests, in a straightforward, tactful manner. He is a true educational leader.

EDUCATIONAL INSTITUTIONS.

Educators and particularly school boards do not appreciate the extent of educational service of the highest type rendered by the school-book publishers of the United States. While it is true that the publishers are in business to make a profit on all books they sell, not one is so mercenary but that he renders some valuable aid each day to the cause of education without hope of reward or recognition.

There was a time when the publisher believed that his entire duty to the schools had been done when he delivered his texts to local dealers or to the board and received payment for them. At present the publisher has freely assumed the duty of seeing that his books are used successfully as well as delivered promptly. It is accordingly not unusual for a book house to follow up an adoption with a series of lectures on the pedagogical principles and methods upon which a series of readers or arithmetics is based. The publisher of new writing books will give demonstrations of the teaching of the writing system illustrated by his books and will critically review and test the monthly specimens which teachers and supervisors send. A number of publishers conduct summer normal schools in music, art, etc., at a nominal cost to teachers. Regular correspondence courses have been arranged by others at no cost to such as will avail themselves of the opportunity.

Practically every bookman serves as an educational information bureau in the course of his travels. Teachers look to the men who visit the schools regularly for suggestions and help on a surprising variety of topics. Practically all bookmen are former teachers and are able to judge of good work when they see it. They have opportunities for observing methods and devices; they learn of conspicuous successes and failures; they know of vacancies. While a few bookmen abuse the opportunities and privileges they enjoy, the great army of them is made up of men who are honestly desirous of helping and who do generously help teachers irrespective of

business. Many a teacher speaks of bookmen as being more helpful to them than the supervisors who come in a critical attitude.

The consulting service of the average publisher is more extensive than is commonly understood. The editorial offices of every large firm include on the staff, experts who are ready to give advice on every problem connected with the use of their books. The amount and variety of correspondence which they handle is surprising and the assistance which they render is incalculable in value.

If school people understood the publishers better and appreciated their services as generously as they are given, the relations would be pleasanter and mutually more profitable.

CRITICISMS OF SCHOOL BOARDS.

The Minneapolis Journal in discussing a local eruption in which members of the school board were criticized for technical violations of the school laws, lays down some general principles which are worth remembering. The Journal says:

Just criticism of public officers is the security of good government, and such criticism of the school board should always be welcomed. There are no other officials whose wise and upright discharge of their duties is of such vital importance to all the people and all have a right to know whether or not these duties are performed faithfully.

But if the service rendered has been efficient and unselfish, the people, who certainly are not always ungrateful, should resent any criticism that takes from members of the board the credit which is their due.

Faithful service challenges respect and honor, and we owe it to ourselves as well as to the members of the board to require positive proof, before we believe that they have been influenced in their actions by unworthy motives. It may be said that such accusation has not been brought against them, but to a man of honor a breath of suspicion hurts like a wound. To be an able member of the school board requires unusual ability, and persons possessing such ability will not consent to serve the public, if all they can hope for is injustice and suspicion.

The school board should be democratic, because the schools comprise all classes, but it should be the best from all classes; and it will be a sorry day for the immense business interests of our schools when skilled business men are unwilling to serve as School Directors.

Any criticism that impugns motives should be weighed very carefully by the facts. In the case of the school board unimpeachable businessmen who have full knowledge of the facts, assert that while there may have been slight technical grounds for criticism, which indeed, it is difficult for a man having wide business connections to avoid, the answer to the larger question, "Have the interests of the City been in any way subverted to private interests?" must be emphatically answered, "They have not."

Efficient public service is to be secured only by giving full confidence and honor to those who render it.

Educational tradition is not all ancient error.

Superintendents all love power, but not all know how to use it.

Common sense in educational experts is a paradox. It is so uncommon.

Many school board members would lose interest in the work if it were not for the opportunity to argue with the superintendent.

Gifts and bequests to education amounted to \$31,357,398 in 1914, of which \$26,670,017 was for universities and colleges, \$1,558,281 for theological schools, and \$1,495,773 for law schools. Since 1896 sums aggregating \$407,000,000 have been given to educational institutions by private donors.

DEPARTMENTAL WORK

C. W. Tenney, Helena, Montana

Departmental work is now carried in many schools and the question was recently raised as to how far down in the grades it could be successfully placed. In order to get subject matter that would help in determining the answer to that question, a questionnaire was submitted to a number of schools that do departmental work and the answers are, at least, suggestive and thought-provoking.

The first answer quoted, came in from the principal of a fully graded school, having nine teachers with no high school work. While he did not answer the question as to how far down in the grades the work should be placed, he did state his approval of the plan in the following clear-cut way:

"1. Inasmuch as it is hardly to be expected that a teacher can be equally proficient in all subjects taught in a grade, the departmental plan allows special fitness and preference to operate in making a teacher happy, efficient and progressive in her work.

"2. The plan allows the continuity of a carefully made aim until results are reached.

"3. Successful departmental work means co-operation of teachers; it means 'modifiability,' the saving grace of teachers.

"4. The plan raises the general level of teachers in both subject matter and method.

"5. It results in a higher standard of accomplishment by pupils.

"6. In a multitude of council, there is safety in regard to any of the pupils' interests where cases are discussed in weekly council.

"7. It makes possible and probable the more careful preparation of work by teachers and pupils.

"8. It allows time for supervised study, one of the greatest antidotes to 'lolling,' slovenly work and will greatly diminish the lagging half."

The next school chosen was just a trifle larger, the entire teaching force consisting of ten people, and the principal replied:

"Under certain conditions, departmental work could be carried on successfully down to the fourth grade. It stands to reason that a teacher, who has specialized along her particular line of work, will give better satisfaction, other things being equal. Some subjects appeal to certain teachers more than others but, under the old plan, the grade teacher had to teach all the subjects of her grade. The subject that she does not like or the one that she is not prepared to teach will, as a general rule, be slighted. Every teacher, worthy of the name, realizes that she can teach arithmetic or grammar much better than history or vice versa."

The number of the grade was raised one year by the next man with:

"I do not believe that departmental work could be used very successfully in any sized school in the fourth grade. Children at that age need good, strict discipline and they are so near the primary age that a change of teachers would confuse them. It could be done in the fifth grade all right."

This position is practically sustained by the principal of a twelve-room school:

"We are doing departmental work this year, and conditions were such that we had to include the sixth grade. After two months' trial, results have been satisfactory, even in this grade, altho the work was not as well done here as it was in the other grades. I would hesitate to try it in the lower grades where the sympathies and individual help of the teacher are necessary. In departmental work, a teacher often does not see her pupils except at recitation period and can-

not give them personal help or be as sympathetic with them as she is when with them the entire day."

Going to a school system with 27 teachers, the superintendent responded:

"I have my doubts about using departmental work in the lower grades. The trouble is not with the work itself but with the personal contact with the teacher that they lose in departing from the old method.

"Then, again, we will need to change some of the ideas and methods of our teachers before we can ever make any marked success of any such methods. We tried it last year in our seventh and eighth grades and we have some of it this year but it failed to reach the fullest measure of success because our teachers did not seem to be able to get good results in the way of scholarship. They were excellent teachers, too, but they have grown up with the idea of having pupils under their care all of the time. Then, it is easy to understand how a certain looseness can creep in under the departmental method and of how students of immature years can be confused by the differences in methods and personality exhibited by the different teachers. I am a convert to the idea for grades from, say six and up, and expect to organize on the six-six plan, but I have my doubts about the work lower than that."

The concrete example given by this superintendent can be duplicated in many other schools:

"A few years ago, we tried the giving of the music and the art by our grade teachers. One taught the art and the other the music. The plan failed hopelessly. The past two years we have had the work done by a teacher qualified along that line and it has been a great success. Pupils that had no use for the work before now have a great fondness for it. I think, however, that you will have to be more careful in the selection of your teachers both individually and collectively. Besides being qualified and energetic and having the right kind of personality, they must know how to pull and work together. One teacher must not expect too much from the other. If a lack of co-operation is in evidence, lack of harmony between teachers and between teachers and pupils will prevail. This condition is often found in high schools where the teachers fail to work together. If departmental work commences with the fifth grade, that will be

soon enough, for a child is too young before that time to adapt himself to so many teachers."

The largest place tried was a school employing 120 teachers and the superintendent gave reason for the hope that was within him in these words which leave no chance for misunderstanding:

"I do not think the departmental plan is good for work below the sixth grade. In the departmental plan, the teacher cannot know the individual as she should. She does not and cannot have that personal interest in every child that she should have. She teaches the subject and is very apt to overlook the humanities which are so essential with the younger children. Many instances of this are found in the high school and in the college. The work is not correlated or co-ordinated as it should be, especially with the younger pupils. All of the teachers have some interest in the child but no one has that particular interest that makes for the best in the child's life and the child loses the personal interest of the good teacher which is so vital in his early career."

Taking into consideration all the letters received, as well as those from which the foregoing quotations were taken, it is safe to make the statement that those teachers who are using the departmental plan in the grades are practically unanimous in the thought that it has already been proven a success and that it will be used much more in the future than it has in the past. And, while not so nearly unanimous in this respect, these same answers also tell the story that the majority of those who have used the departmental plan, who have found it successful, who believe in it and who are planning to use it in future work, would say that, for the present at least, the interests of the plan, the schools and the pupils will be best conserved by confining its use to the sixth and higher grades.

NEW MEXICO'S NEW STATE SUPERINTENDENT.

J. H. Wagner, superintendent of the city schools of Santa Fe is to be the next state superintendent of public instruction of the State of New Mexico.

Mr. Wagner was one of the few Republicans elected to state office in the west at this year's landslide. His popularity is so great in the state that his friends call him "John," not thru familiarity but for the love and esteem in which they hold him.

J. H. Wagner is ranked as one of the most efficient schoolmen of the west. We rightfully look to see great progress made in the schools of the State claiming the oldest civilization of the United States, yet a new state educationally. The following character study of Mr. Wagner is taken from the Year Book of the New Mexico Educational Association:

"Upon the secretary of any large association or organization develops most of that thankless but necessary work which goes to make that body a success and especially is this true of the annual meetings of that body.

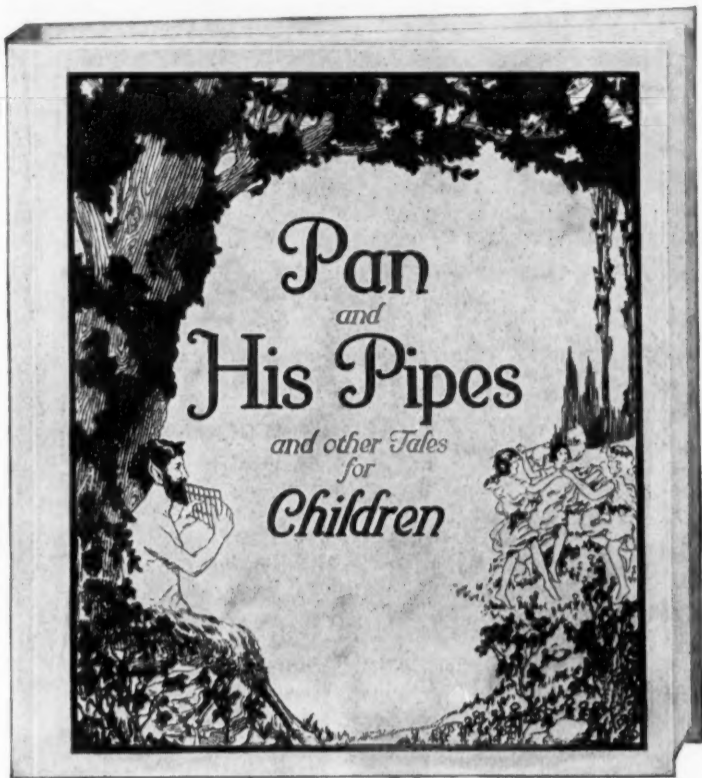
"To J. H. Wagner, superintendent of the city schools of Santa Fe then belongs the credit for whatever of excellence is found in the program, the work to be done, and all of the other features of the meeting of the educational association whose program is here presented.

"Mr. Wagner long has been known as an educator of efficiency and ability, but he was possessed as well with a business head, and executive ability far beyond the ordinary was not brought out until he was chosen Secretary of the New Mexico Educational Association, since which time he has proven himself an able business man and an active and close organizer.

"Mr. Wagner was born in the 'jungles of Indiana' some time in the seventies. He was educated in the country schools of Whitley county and graduated from the North Manchester high school in 1891. He then entered the



MR. JOHN H. WAGNER,
State Supt.-Elect. of Public Instruction,
Santa Fe, N. Mex.



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By Katherine D. Cather

This is a little art-book of child stories which relate in an interesting manner the old myths and historical tales about the beginnings of music.

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| I. <i>Pan and His Pipes.</i> | VI. <i>When Knighthood was in Flower.</i> |
| II. <i>The Tortoise that Gave the World Music.</i> | VII. <i>The Violin Makers of Cremona.</i> |
| III. <i>The Holy Bird.</i> | VIII. <i>A Star and a Song.</i> |
| IV. <i>The Harp King Alfred Played.</i> | IX. <i>The Holy Grail.</i> |
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All of the above stories are well suited to the reading lesson, or to the music-listening period.

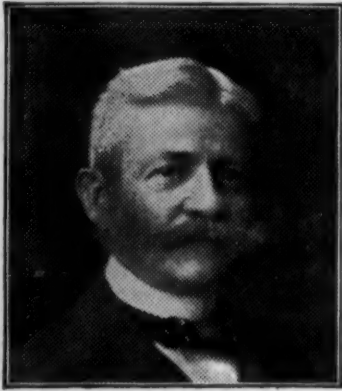
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Indiana State Normal School and completed the preparation for the teaching profession in 1896.

"He was made assistant in the department of biology in this institution, holding the position until he entered the University of Michigan.

"He served as Principal of the Alexandria, Indiana, high school for five years and put four years in a similar capacity at his old home at North Manchester. Mr. Wagner came to New Mexico seven years ago, serving three years as superintendent of the city schools of Las Cruces, whence he went to the capitol to take up his present work.

"My principal asset is my wife and four boys," Mr. Wagner declares proudly, adding, "My forwarding address was left in Indiana; they know where I am."

KANSAS CITY, MISSOURI, AND ITS SCHOOLS.

(Continued from Page 19)

rooms in making the estimate. In the erection of these buildings, two distinct types have been developed; one, on the customary two-floor plan with basement. These buildings have auditoriums, shops, rooms for cooking, open-air rooms, playgrounds, school gardens, janitor's house, etc., as above indicated. The other is the one-story type with all the facilities contained in the other type, but with several decided advantages. First, they can be built at less cost. Second, by having doors from each room opening directly upon the school yard as well as upon the inner hall, the danger from fire and panic is practically eliminated. And third, the light is admitted from the ceiling giving more uniform light without shadows, and less affected by the glare of the sun whatever its position in the sky. This type of building is preferred by most teachers and patrons. The lessened cost is believed to be an essential feature. The schools of the

future may require such changes and modifications as to make it unwise to construct buildings so substantial as to endure for one or two hundred years. In the next generation we may wish to replace all of our present structures with others which shall more nearly meet newer needs.

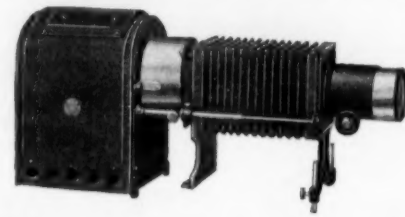
Vocational Education.

In addition to the regular work in manual training and home economics, considerable attention is being given to prevocational and to vocational activities. In six of our elementary schools, shops for cabinet work, electrical work, painting, printing, etc., have been established. The pupils in the upper elementary grades who desire to emphasize this prevocational work will give from one-fourth to one-half of their time in these shops. A more advanced form of vocational activities is carried on in the Lathrop School of Mechanical Trades, in the Polytechnic Institute, and in the vacation schools. In this work the attempt has been made to connect the activities of the shops with such work as possesses real practical and commercial value. It takes the form of the construction of playground apparatus, school furniture including desks, tables, chairs, cabinets, etc., electric wiring of school buildings, painting of school buildings, inside and out, sheet metal work, printing for the school district, etc. The value of the output during the past fiscal year has been more than \$40,000 with a total outlay for teachers' salaries, materials, and for a nominal payment of the boys' wages during the vacation term of about \$25,000. While this work has been economically beneficial to the district, its dominating purpose both as to the projects undertaken and as to the methods carried on, is educational. No attempt whatever is made to exploit student labor for

the benefit of the products produced and no individual is required to remain upon any piece of work after he has obtained from it all the educational value it possesses for him. In these industries the purpose is to permit the student to discover the particular line of work for which he has greatest aptitude and gain some knowledge of a practical nature that will enable him to reach a higher plane in whatever work he undertakes and do so in a much less period of time. We are pleased to say that in all our work in this department we have received the active and hearty support of the labor organizations.

Another feature of the school system of the city merits notice. The public library is owned and administered by the board of school directors. All new buildings that are being erected are provided with special rooms for branch libraries. In addition to the schools where special rooms have been provided, there are other schools in which there are established distributing stations. In the city including the branches and distributing stations, there are 53 centers for the distribution of books of the public library. By this means adults as well as children are being taught the use and benefit of library facilities as an adjunct to public education. By using school buildings and in many cases by the assistance of teachers, this work is done at much less expense than is possible where the entire work of the public library is operated by a separate organization. Particularly satisfactory results have followed from the location of a public library branch in the high schools. During the hour which a student has for study, he may, if he desires, spend it in the library room having access there to a much larger list of books and being directed by an expert

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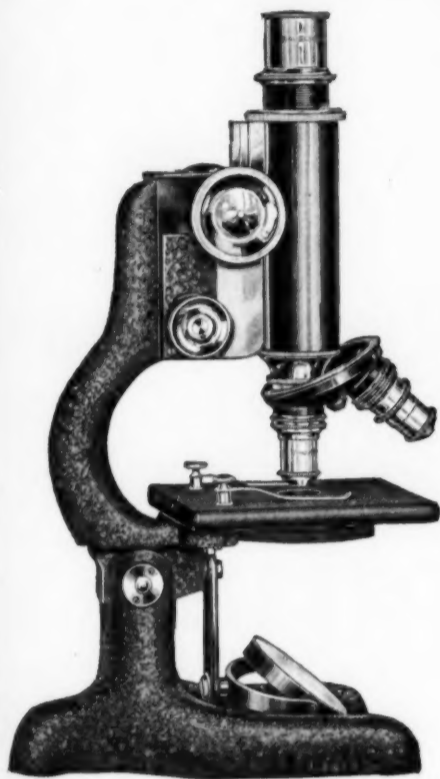
Bausch & Lomb

Aids to Teaching Through the Eye

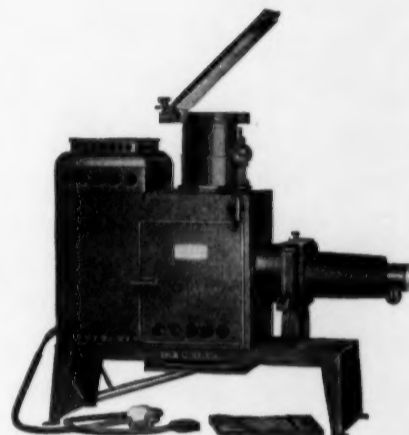
If you attend the ANNUAL CONVENTION of the DEPARTMENT OF SUPERINTENDENCE of the N. E. A., at Kansas City this month, you can see two of the modern teacher's greatest aids in practical application at our exhibit booth in Convention Hall.

These are the **Balopticon**, with which every subject taught in school can be amplified by projecting suitable illustrations where all can see; and the **Microscope**, which reveals the hidden mysteries of Biology.

We shall have several models of both instruments on exhibition, with ample space and facilities for demonstrating. Our representatives will be glad to tell you how such apparatus can be used effectively to meet your particular needs. **CALL ON US.**



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librarian in a way not possible where such facilities are wanting.

The expenses of an addition to the present central library and a proportionate part of the elementary buildings chargeable to library purposes aggregate more than \$300,000 of the last bond issue. In addition to the branches in the public schools, there are also branches in other public institutions, one being located at the Jewish Educational Institute, another at the Boys' Hotel, and another at Garrison Square, an institution under the management of the park board devoted exclusively to the use of the colored people.

During the past four years much attention has been given to school gardens. A commissioner of agriculture is in charge. There were maintained during the past year gardens in 62

schools. Coming under the commissioner's jurisdiction, gardens were maintained on 984 vacant lots, and he had nominal supervision over more than three thousand home gardens cared for by the children. This work is administered from a central garden containing 38 acres. This is designed for demonstration purposes for both school and community use.

The limits of this article prevent a detailed description of the many different schools which exist for carrying out the general plan of education which has been outlined above. Superintendents are cordially invited to take as much time as possible to visit the schools of the city. Information will be given as to the schools that may be in operation, the times and methods of reaching them so that as little time may be wasted as is possible.

FUNCTIONS AND RELATIONS OF RURAL SUPERVISORS.

(Continued from Page 23)

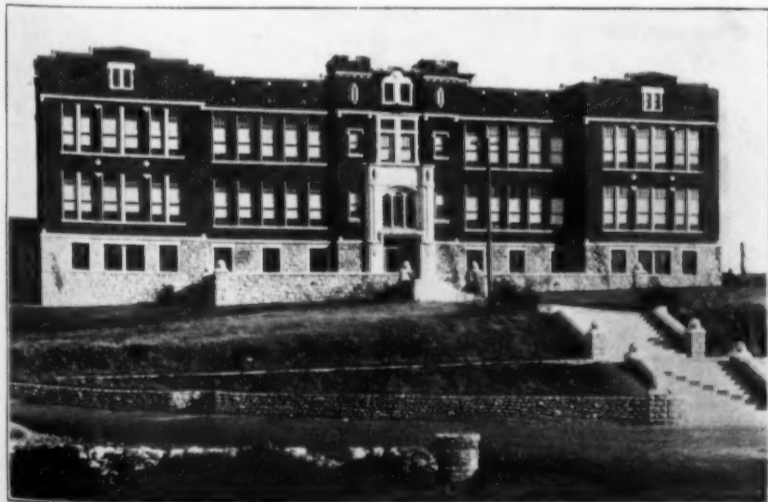
tions, etc. (2) Lack of good training for country life in the schools. (3) Lack of good highways. (4) The widespread depletion of soils thruout the country. (5) A general need of a new and active leadership.

The underlying problems are (1) knowledge, (2) education, (3) organization, and (4) spiritual forces.

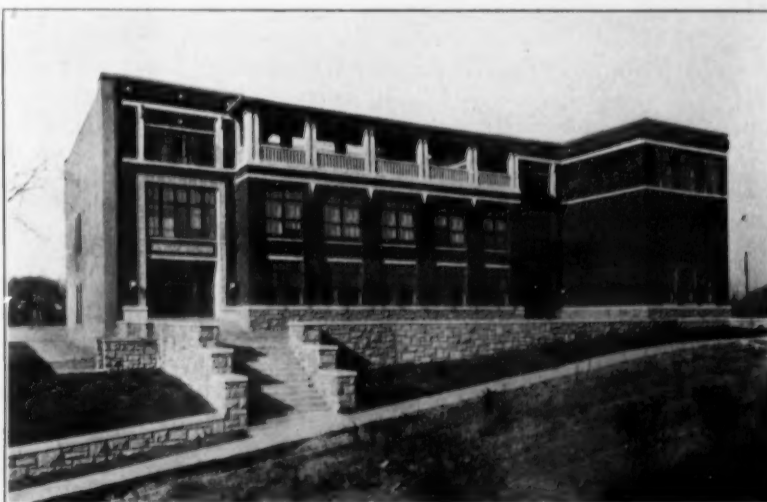
The commission recommended (1) taking stock of country life, (2) national extension work, and (3) a campaign for rural progress.

It was stated that the *educational problem* is the greatest single question that has come before the commission.

The rural teacher should be trained in the broad principles of rural reconstruction and



Van Horn Elementary School



McCoy Elementary School—incomplete; left wing not yet erected.

The Problem of the Shower Bath



Where a school is fortunate enough to have shower bath facilities in connection with gymnasium or playground, the matter of soap for the children is a problem.

The Palmolive Vending System provides a means of furnishing a high-grade soap in a sanitary, individual cake without expense to the School Board. The system requires only a minimum of supervision and is at the same time "boy proof."

The main item in this system is Palmolive Soap (the most popular 10c toilet soap on the market today), with the Vending Machine illustrated herewith.

Let us know how many showers you have and the average daily attendance and we can give you some interesting facts.

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"A Soap for Every Purpose." Let us know your requirements.

Read what Prof. Ellis, of the University of Texas, the greatest student of Public Hygiene, says about

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The original Washable Liquid Wall Paint, the most successful finish for Walls of Schools. Beware of imitation. Anything offered like it is an imitation. Send for book of tints, combinations, and Prof. Ellis' suggestions.

Elastic Interior Finish

is the varnish which is used in many schools, even when being built, because when any water or the sweating of a new building is on it, it is not affected.

ZINOLIN
(non poisonous)

"Arnold-ized" zinc paint

is the All-Zinc, No-Lead Paint for the outside. Send for circulars telling of this.

Keystone Varnish Company

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should have a grasp of the whole problem of re-directing education. Especially is all of this true of the qualifications of the rural supervisor.

In her recent book on "Country Life and the Country School," Miss Mabel Carney summarizes the needs of the country school as follows: (1) educational re-direction, (2) physical improvement, (3) social re-direction, (4) trained teachers, (5) better supervision, (6) better legislation, (7) change of system, (8) increased co-operation, and (9) sufficient revenue.

It is the function of the supervisor to bring these needs before the patrons of the school in every possible way, thru community meetings, the organization of improvement clubs, demonstration work of pupils, literary, social and religious activities, campaigns of various kinds and the like.

In short, no executive officer of a community occupies quite so important a position from the standpoint of social welfare as does the supervisor of schools, and no legislative body of men carry quite so weighty a responsibility from the standpoint of the advancement of civilization as does the school board.

STANDARDS FOR JUDGING TEXT-BOOKS IN ARITHMETIC.

(Concluded from Page 24)

in the treatment of certain topics (and it usually is), each successive recurrence to the topic should involve more difficult phases of it and a varied method of attack.

9. Suggestions should be made for much supplementary work growing out of local interests.

10. Provision should be made in the index for ready reference to important facts and topics scattered thru the book. The appendix should be used for optional material, data for problems, tables, definitions, etc. These

features are of special importance in the more advanced books.

11. The teacher should be permitted some exercise of judgment where more than one course of procedure is possible in the matter of methods; but too many methods of doing the same thing should be discouraged, as confusion is likely to result in the mind of the child.

12. Illustrations should make a substantial contribution to the work in hand.

13. Textbooks in arithmetic should exemplify the highest standards of mechanical make-up as determined by experts.

On the basis of the standards suggested above the following score card is suggested for judging texts in arithmetic. The marking is based on a total of 1,000 points to be apportioned among the various standards as indicated. Any person using this system may follow his own judgment as to the various standards to be taken into account and assign each such relative value as he sees fit.

SAFEGUARDING SCHOOL BUILDINGS AGAINST FIRE.

(Continued from Page 28)

quickly, quietly, and in the most orderly manner by pre-determined routes or paths, without the aid of the teachers. We advise that the school teachers should remain in their respective schoolrooms until every scholar has made its exit therefrom. They should be the last and not the first to leave the building in case of fire therein.

While it is desirable to have special fire alarm boxes located on school buildings, it may not always be necessary, and the relocation of some public box by placing it on a school building might serve the same purpose, but they should

in all cases be located on the outside of the building.

Janitors should be selected not because they are unable to perform any other form of useful work or because their appointment would please influential people, or because they are the friends or relatives of city, state or town officials, or because of their political affiliations, but because of their qualifications. They should be able-bodied, intelligent men; possessed of good judgment; cool and able to act promptly in case of emergency; and should be on duty in the school building during the entire school session unless their assistants, who possess the same qualification, are left in charge during their absence. No school building having four or more classrooms should be left without the presence of the janitor or one of his assistants during the school sessions. Janitors should not be permitted to smoke in any part of the building.

Inspections of all school buildings with a view toward the prevention of fire, should be frequently made by a member of the uniformed force of the fire department, who should report to his chief the conditions as he finds them; and any neglect on the part of anyone responsible for the conditions of the buildings, should be reported to the school authorities and should such neglect in any way endanger the lives of the children, prompt and summary punishment should follow. In towns where there is no uniformed force, these inspections should be made by the chief of the fire department.

One of the most important and effective, and yet the most neglected, means of reducing the fire loss is good housekeeping. Order and cleanliness is the rule in every well-cared-for home, and it should be the rule in every school build-

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Privacy is at a premium in these public days. Efforts must be made to develop that fine individuality in youth which thrives only if there is some chance at seclusion and some encouragement of individual study.

Why not give your pupils a suggestion of it at school? Why not provide them with individual Durand Steel Lockers, the handsome, fire-proof, borrow-proof lockers of the orderly, modern school coat room?

Protect the pupils against the spread of contagious diseases, and give them each the subtle human satisfaction of having a clean, safe place at school for private belongings.

Write today for our new catalog showing modern styles of lockers for school coat room and gymnasium

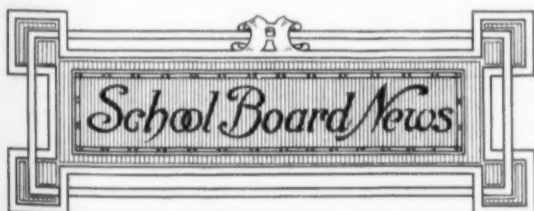
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New York

ing. The people of this country *must* be educated in the simple means of fire prevention, as that is the only way to prevent the enormous yearly fire loss, and the place to begin is in the schools which house, for so many hours of each day, the precious lives of their children. Let parents visit the schools frequently and make sure that every precaution that human forethought can suggest has been taken to prevent fire from occurring therein. If they believe there are conditions that should be remedied, then let them return to their homes and places of business and see that nothing is left undone to make the children safe.

Fire is one of our most useful agencies, but can, from a puny infant, become a most terrible task-master, and it is the duty of all to keep it in its proper sphere—that of servitude.



The board of councilmen of Buffalo has confirmed the appointment of Mr. Joseph A. Wechter as a member of the board of education.

Chicago, Ill. A new vigilance league to be composed of the parents of school children, has been organized for the purpose of protecting the interests of the city's half-million school population.

The league claims to be non-partisan in membership, its members being drawn from all classes whose interests are identical with those of the children. It will have for its special consideration the health of the school children, the promotion of instruction in economics and the development of a system of vocational training.

Philadelphia, Pa. The Committee on Elemen-

tary Schools has recommended to the board that action be taken against the proposed plan to make primary and kindergarten teachers do double duty in the different classes. It is the opinion of the board that such a plan would be a detriment to the interests of the children and a burden on the teachers.

Detroit, Mich. The board has adopted a plan thru which all salary checks are mailed to the schools. Checks for teachers are mailed to the respective buildings. The principal consults his payroll list and distributes the checks to the teachers in his building.

In the case of the janitors and helpers, the chief janitor of each building goes to the board and gets the checks for all men under him. The plan is convenient for the teachers and saves time for the board officials and clerks.



L. B. HILL,
President West Virginia State Education Association,
Athens, W. Va.

Washington, D. C. Classes for janitors and engineers have been opened in the evening schools. More than one hundred janitors have enrolled in the several classes.

Mr. Robert H. Gordon, president of the board of Roselle Park, N. J., died at his home at the age of 76.

Oakland, Cal. A change in the management of the supply department of the board is planned to overcome inefficiency in purchasing and distributing. Two remedies are considered, the first to open an office in the city and employ a storekeeper. The second is to dispense with the purchasing agent and to install a storekeeper. It is planned to purchase all supplies in large quantities to make possible great savings in school expenditures.

Indianapolis, Ind. The board has fixed the minimum salary of public school janitors at \$55 per month.

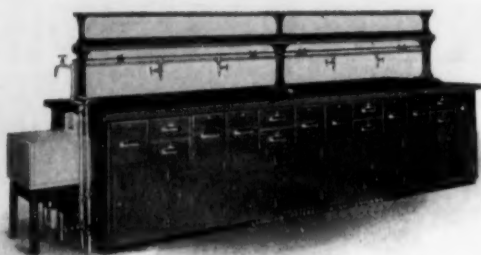
The citizens of Worcester, Mass., thru the ballot box, have reduced the membership of the school board from 33 to 11 persons.

Detroit, Mich. The Detroit Bureau of Governmental Research has recommended that the board create the office of business manager. A study of the present organization by the Bureau shows that there is no responsible head for the effective operation of the business department. The Bureau further states that the conditions point to an urgent need for centralizing authority in one person to obviate inefficiency, delay and friction in the handling of business matters.

Baltimore, Md. The school board has denied a request of the elementary teachers that they be represented at all meetings of the board. A recommendation that a representative committee of the entire teaching force be formed, has been tabled.

New Orleans, La. The office of manager of school supplies has been abolished for reasons of economy. The work is to be divided between the secretary and the inspector of buildings.

Minneapolis, Minn. The board has opened a library for the use of the administrative department. All private pedagogical libraries and semi-private libraries of superintendents have been merged in one room and new books have been added by direct purchase. The entire col-



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lection has been cataloged and indexed for immediate use.

Supt. John D. Shoop of Chicago has attributed the decrease in school attendance during 1916 to the unusual demand for child labor. The enrollment figures show that there were 348,310 children in the schools in 1916, as against 355,021 in 1915.

Mr. Shoop pointed out that children employed in department stores are getting more money this year than ever before. This form of child labor while within the law is deplored by the school authorities and cannot be legally combatted by them. There is a proportionate ratio in the decrease for grade, high and evening schools.

Spokane, Wash. A consolidation of the school districts of Hillyard and Spokane is planned. The action is a step in the direction of economy in administration and an increase of educational efficiency. There will be a saving in taxes and in clerical expenses for the Hillyard district.

New Orleans, La. A cash deficit of \$715,555.38 in the finances of the school board is shown in the annual report of Supt. J. M. Gwinn. For a number of years the board has found it necessary to exceed the appropriation, and at no time since 1910 has the income been as great as the expenditures. The years 1912-13 and 1915-16 show the largest deficits due to unexpected and large decreases in income for those years.

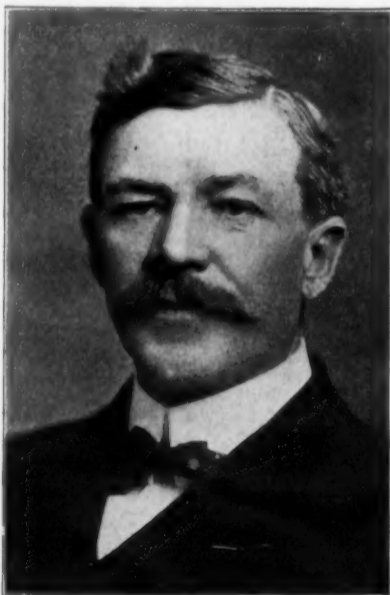
During the past year the income of the board was \$11,949.04 less than it was five years ago while the number of children in the schools has increased 16 2-3 per cent. These pupils required the services of 170 additional teachers, which cost \$102,000 annually at the modest salary of \$600 a year.

The salaries of teachers and principals now amount to eighty per cent of the total expenditures while the average of 20 cities recently studied, is but 73 per cent. Altho the proportion spent for salaries is large, it is noted that the salary schedule is much below the average for cities of this class.

The New York Board of Education has given its final approval to the creation of the office of business manager of the schools at a salary of \$10,000 per year. The duties of the new official

will be determined by the committee on by-laws. The general plan is that the new officer will be the executive of the board in all business matters and will unify the work now done by the several business bureaus.

The Board of Industrial Education of Green Bay, Wis., has been granted the full appropriation asked for by it of the city council of Green Bay. Under the Wisconsin Industrial Education Act, city councils are required to appropriate such sums as the education boards demand, within the mill limits provided by the law.



EDWARD T. FAIRCHILD,
President New Hampshire College of Agriculture and
Mechanic Arts, Durham, N. H.

Dr. Fairchild died January 23 after an illness of several weeks. He was a native of Doyleston, Ohio, and a graduate of Worcester University. He began teaching at the Hayesville, Ohio, Academy and successively held city and county superintendencies in Ohio and Kansas. He was state superintendent of public instruction for Kansas for three terms and in 1912 was president of the National Education Association.

The Green Bay Council, early in December, insisted upon cutting the budget of the industrial schools and the Board of Industrial Education took the matter into the courts to compel the full budget.

The case was ready for trial when the city council suddenly changed front and agreed to supply the money asked for. The legal proceedings were then stopped with the understanding that the educational authorities might renew the action at any time.

The administrative department of the schools at Baltimore, Md., has compiled figures showing variations in time consumed in the teaching of various subjects in different schools of the city. The figures are for the benefit of principals and will be followed by a second study showing fixed limits between which the variation must be confined.

After a long agitation over the proposed introduction of the Gary plan in the schools, the chamber of commerce at Akron, O., has ordered a survey of the school system. The survey is to embrace a study of a number of cities thruout the county and is to be conducted from the point of view of the effect of the plan on the children. The survey also is to learn what can be done for adult aliens and for working boys and girls who have left school.

An educational committee of four will have general charge of the survey and the actual work will be done by a paid secretary giving his entire time to the details.

The school board at Marshalltown, Ia., has opened two schools for exceptional children. The first was opened for the admission of children who are misfits in the regular classes. In most cases these children are retarded because of personal illness, irregular attendance, frequent change of residence or other reasons. Before admittance, such pupils are subjected to physical examinations and psychological tests, showing in some cases, easily remedied defects which were largely responsible for the retardation. In addition, the previous school record and the home environment of the children are studied, and the methods of instruction adapted to individual needs. Singing, motivated play and hand training occupy a considerable part of the time.

Sanitary Plumbing

for the

School



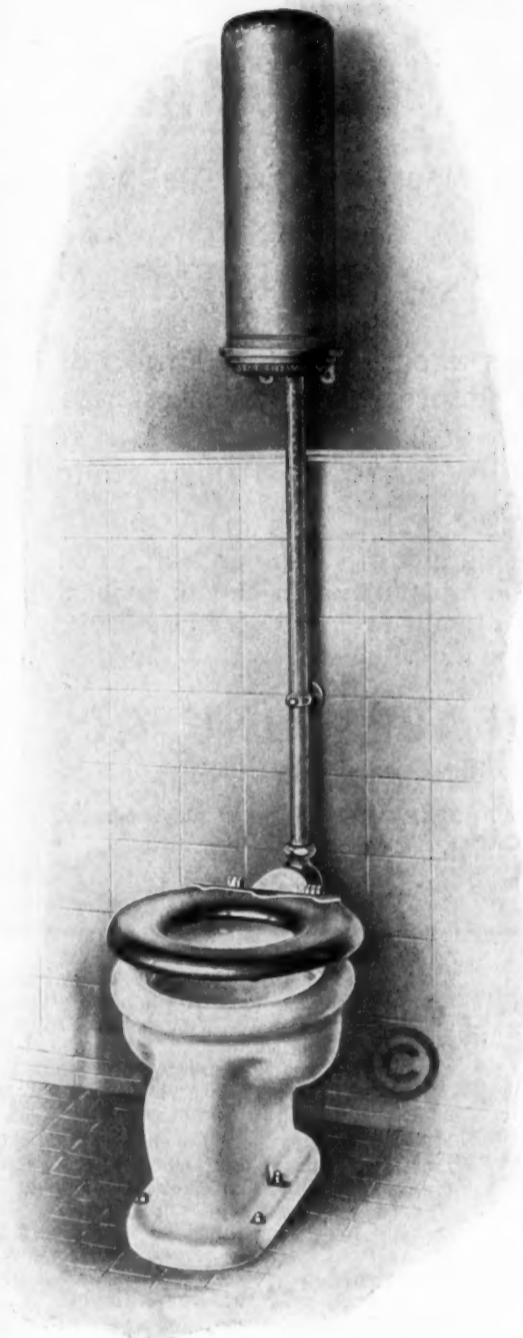
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The Clow Automatic Water Closet

(Madden's Patent)

ITS OPERATION

The Clow automatic water closet is operated by the depression of the seat. This actuates on a valve piston which projects about one-half inch beyond the earthenware ABOVE the rim and BACK from the opening of the bowl. This action opens the supply to the tank and simultaneously closes the outlet to the bowl. While the seat is depressed, the tank is being filled, compressing the air in the top of the tank. Immediately the seat is released, the supply side of the valve closes and the outlet side to the bowl opens. The pressure caused by the compressed air in the tank forces the water into the bowl, ejecting the contents of the bowl at once, thoroughly cleansing it and leaving a fresh supply of water.



The "Metric" M-1861

SAVING OF WATER

The size of the tank is proportioned to insure a sufficient quantity of water at 20 lbs. pressure to give a thorough and adequate cleansing and refilling of the bowl. This requires $2\frac{1}{8}$ gallons as against $6\frac{1}{8}$ gallons for the open tank pull operating closet. Thus it can be seen that the saving in water, say \$.06 per thousand gallons, will in a very short time pay not only the slight extra cost of the Clow automatic closet but the entire cost of the water closet.

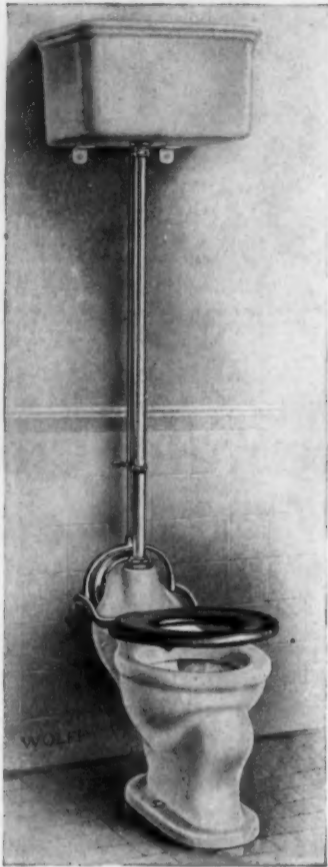
Further facts will be given regularly in this space, or you can get full information by writing to the Manufacturers.

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"Wolff" Plumbing Retards School Building Depreciation

Wolff Plumbing Fixtures last as long as your building.

That's why a substitute for "Wolff" plumbing is always a *poor* substitute.

If Wolff plumbing has been used, the depreciation of a school building, figured theoretically, is often not evident in the appearance of the building. But if cheap substitutes for "Wolff" have been used, their quick deterioration is strongly noticeable.

Don't use substitutes for Wolff plumbing. You can't afford to let your school's reputation suffer by putting in cheap, unsanitary plumbing, with its endless train of expense. Use Wolff plumbing for your school building.

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A Model Set of Rules and Regulations

The New Aberdeen, S. D. Rules

The school board of Aberdeen, S. D., has recently issued in pamphlet form, rules and regulations governing the board, the superintendent and the school clerk. The rules while brief and to the point, are adequate for the conduct of the school system and give considerable latitude to the superintendent in administering the schools.

The rules are reproduced below:

I. The Organization of the Board.

1. The meeting of the board for organization will be held on the last Friday of August of each year. It shall be called to order by the Secretary. A President, and Secretary protempore shall be chosen. The board shall then elect a President, and Vice-President and a Clerk for the ensuing year.
2. The regular meetings of the board shall be held at the office of the Superintendent on the last Friday of each month at 7:30 P. M.
3. The order of business shall be as follows:
 - (a) Calling to order.
 - (b) Approval of minutes.
 - (c) Claims and accounts.
 - (d) Petitions and communications.
 - (e) Reports of Superintendents.
 - (f) Unfinished business.
 - (g) New business.
 - (h) Report of committees.
4. Roberts' rules of order shall be the authority unless otherwise provided.
5. The President shall preside at all meetings of the board, appoint all committees not otherwise ordered, and perform such duties as are provided by law. In the absence of the President from any meetings, the Vice-President shall preside.
6. The Secretary shall audit all claims, approve all bills and perform such duties as are provided by law.
7. All committees, shall perform all business transactions thru the office of the Clerk. Committees of the board, appointed by the President,

unless otherwise ordered, shall investigate and act for the board in such ministerial matters as may be assigned to them by the board, and in other matters subject to the approval of the board. Such committees shall report to the board in writing in such manner and at such times as called upon by the board.

8. The Clerk of the board shall be the Secretary of the Superintendent, and shall be under the general direction of the Superintendent.

9. At the regular meeting in January, or at any regular meeting when there is a vacancy in the Superintendency, the board shall elect a Superintendent of Schools for a three-year term, which shall begin on August first, following the election, or on such other date as may be determined by the board.

10. At any regular meeting of the board any by-law of the board or any rule or regulation governing the schools may be enacted, amended, or repealed, by a majority vote of the full board membership, provided that notice of such proposed action shall have been given at the regular meeting last preceding; any by-law, rule or regulation may be suspended at any meeting by the vote of four members favoring such suspension.

II. The Superintendent.

The Superintendent is the executive officer of the board of education for the management of the schools. He shall:

1. Attend the regular and special meetings of the board, and shall co-operate and advise with all committees of the board.
2. Prepare and submit to the board, by-laws, rules and regulations for the proper conduct and guidance of the board and the management of the schools.
3. Arrange and change the boundaries of the school districts, subject to the approval of the board.
4. Investigate the need of, and recommend to the board, provision for school facilities in the school system.

5. When called upon give written opinions to the board or its committees, of all matters to be acted upon and make written monthly reports of the general condition of the schools, with such recommendations for their improvement as require action of the board; at the regular meeting in July he shall submit an annual report.

6. Recommend to the board, from time to time, principals, supervisors, and teachers, and the other employees of the school system as there is need for such employment during the year, and the board shall elect no person, as principal, supervisor or teacher, not recommended by the Superintendent. On or before the last Friday of March each year the Superintendent shall submit the names of persons recommended to be appointed or reappointed for the ensuing year.

7. Recommend to the board for approval courses of study, important changes in courses of study, and textbooks to be used in the schools.

8. Have power to suspend any pupil from the schools whenever in his judgment the best interests of the school demand such action, such suspension to be reported to the board at its next regular meeting.

9. Prepare, in conference with the Secretary, an annual budget, showing by departments appropriations necessary to meet the estimated needs of the ensuing school year, and submit the same to the board for approval on or before the regular meeting in June each year.

10. Immediately after the school tax has been levied by the City Commissioners, he shall prepare and submit a detailed budget of estimated expenditures for each department of the school system during the then current fiscal year.

11. Within the limits of the detailed budget of estimated expenditures for the year, duly approved by the board, have power to approve and direct all expenditures and purchases, making to the board at any time such report of expenditures in addition to the monthly report of the Superintendent and Secretary, as the board may request.

12. Recommend to the board transfers from one budget item to another as conditions may require.



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13. In the interest of efficient administration, have power to decide all matters of detail purely ministerial and administrative in character, that may arise concerning which no specific provisions are made in these by-laws, rules and regulations. All decisions of the Superintendent as herein authorized must be reported by him to the board not later than the first regular meeting of the board following such decisions.

III. Clerk of Board and Secretary to the Superintendent.

The Clerk of the board and Secretary of the Superintendent shall:

1. Give bond for the faithful performance of his duties.
2. Attend meetings of the board, keep the minutes of the meetings, and advise and co-operate with the board's committees.
3. Represent the board under its direction in negotiations relating to the construction, repair and maintenance of school property.
4. Receipt for, store and distribute books, supplies and materials and have charge of all ministerial and detail business matters, as authorized by the board and as directed by the Superintendent.
5. Attend to the school census enumeration each year, and make reports of the same in such manner as provided by law.
6. Make to the board, thru the Superintendent, a monthly report of the general condition of the buildings and other property of the board, as to repairs, construction and improvement, with recommendations thereon.
7. Supervise all matters of repair and have general charge of all property belonging to the independent school district of the city of Aberdeen.
8. Cause the property of the school district to be insured in such amounts as the board may, from time to time direct.
9. Examine contracts and other papers in which the board is a party.
10. Receive tuition fees, money, from the sale of books or other school property, the use of the buildings or other sources except such as are paid to the school treasurer according to law,

and deposit money so collected with the School Treasurer.

11. Make and keep a list of school property, real and personal, belonging to the independent district of Aberdeen.

12. Be the sole accountant of all funds of the school district and keep a complete record of all such funds, and all business transactions in which the board of education is a party.

RULES AND REGULATIONS.

New York, N. Y. The board has amended section 40 of its by-laws to read as follows:

"Associate City Superintendents shall be assigned to duty by the City Superintendent, and shall perform such duties as he may direct. For purposes of administration and supervision, the Board of Superintendents shall have power to divide the schools of the city into divisions, and one Associate City Superintendent shall be assigned to each division as its representative in the Board of Superintendents. The Board of Superintendents shall have power to form such standing committees as it may require and to determine the number of members to be assigned to each, and the chairman of the Board of Superintendents shall make assignments of the Associate City Superintendents to such standing committees and to duty in connection with meetings of committees of the Board of Education. Each committee of the Board of Superintendents shall have the right to make an annual report on the activities under its charge, with recommendations for improvement in school or teaching efficiency, and such report when approved by the Board of Superintendents, shall be transmitted to the Board of Education."

St. Joseph, Mo. The board has passed a rule making vaccination compulsory for all pupils in the schools.

Washington, D. C. The board has ruled that secret societies shall not be maintained after 1918. Initiation of new members has been prohibited.

Nashville, Tenn. The Nashville Safety Council has distributed among the schools a set of rules for the safety of children on public thoroughfares. The rules read:

At school keep to the right on walks, in halls and going up and down stairs. Go up and down stairs one step at a time.

At recess look where you are running. Don't bully the little fellows. See that the little chaps have a fair chance on the playground and that they don't get hurt.

When school is out and you are enjoying yourself at play, don't play on the streets where street cars run. Look both ways when you are crossing streets and railroad tracks.

Keep a sharp lookout for automobiles, wagons and motorcycles when alighting from a street car. Make the car stop before getting on or off. The car can wait, but step lively. Peek around to see what's coming on the other side or the other track when crossing behind a street car.

Watch in each direction when you have an umbrella. Look out for automobiles turning corners. Look where you are going and always turn to the right.

Don't throw stones. It's a very dangerous habit. Get this motto in your head: "Better safe than sorry."

When vacation comes and the school books are put away, don't loiter around railroad stations or cars. Don't walk on railroad bridges or tracks. Don't hitch on or steal rides on wagons, automobiles and cars. Never use your roller skates, skatemobiles or coasters near street car tracks or where automobiles run. Don't crawl over, under or between cars. Look and listen for danger signals and heed them.

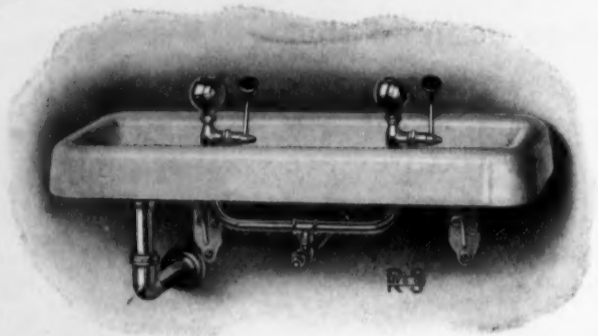
Any wire may be a live wire. Don't touch wires. Keep your eye on a scratched match until you are sure the spark is dead. Play safe as much for the other fellow's sake as for your own.

Children, read this over and over again. It may save you from injury or death.

Rules for the Use of School Buildings.

The school board at Lincoln, Neb., has adopted a set of rules governing the public use of school buildings for community or municipal improvement, school meetings or social center work. The buildings are not opened for stated regular meet-

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ings or for the promulgation of particular doctrines or beliefs. The rules read:

(1) The superintendent of schools and the committee on social centers and night schools shall have the power to grant permits for the use of the school buildings and grounds for the carrying on of those activities which will promote educational, recreation or other civic interests, providing such use does not interfere with the regular school curriculum, either during the day or night sessions. The above named may at any time for reasons deemed sufficient revoke any permit issued by them.

(2) No use may be made of any school buildings or grounds which is contrary to the city ordinance or to the rules under which buildings are insured.

(3) The use of tobacco will not be permitted in the school building, nor of intoxicants, either in the buildings or on the grounds.

(4) The meetings must be open to all citizens not inconsistent with the purpose for which the meetings are held.

(5) There shall be no admission fee charged for any performance, exhibit or entertainment where the proceeds would be used for purposes of personal gain or private benefit.

(6) The use of the school buildings or grounds will not be granted to any group except upon a satisfactory guarantee that it will be responsible for the proper use of the premises, for the orderly conduct of the meeting held under its control, for the prompt payment of any charges in cases where such charges are made, and for the prompt payment of any damages to school property while in use by it. Any society or association failing to pay promptly to the secretary of the board of education the bill for such damages may be denied any further use of the building or grounds.

(7) There shall be no charge for the use of buildings by pupils, teachers, school alumni or school patrons for school purposes, nor for meetings of an educational or civic nature, or meetings for purposes of community or municipal improvements, providing the free use of the buildings shall not be extended to any organization for stated regular meetings or for the promulgation of particular doctrines or beliefs. All

regular social center activities shall be carried on in their respective centers free of charge.

(8) There will be a flat charge of \$1.00 for classrooms, \$2.50 for grade school auditoriums other than the McKinley, \$3.00 for the McKinley, and \$5.00 for the high school auditorium, for each meeting of all groups, other than political, not specified. For the use of the buildings by political parties a charge of \$2.00 for each room, \$5.00 for any grade school auditorium other than the McKinley, \$6.00 for the McKinley, and \$10.00 per meeting for the high school auditorium, will be made. For the use of a room for voting booths at any election, there will be a charge of \$5.00. All payments must be made in advance to the secretary of the board of education.

(9) Hours: (a) Meetings held in the afternoon shall not continue after 6 p. m. (b) Meetings held in the evening shall be between 7:30 and 10:45 p. m.

SCHOOL-BOARD SECRETARIES TO MEET.

The Fourth Annual Convention of the Association of School-Board Secretaries of Pennsylvania will take place on February 6 and 7 at Harrisburg. Mr. Charles H. Meyer of Johnstown will preside. The program for the meeting provides for an informal session on Tuesday evening, February 6th at which all secretaries of the state have been asked to participate.

The formal sessions of the convention will open on February 7 at 9:30, with an address of welcome by Mr. D. D. Hammelbaugh, secretary of the Harrisburg Board of Education. The president's address will then be read by Mr. Meyer. The balance of the program will be as follows:

Wednesday Morning, February 7.

Registration of delegates and opening of convention.

Address of Welcome—Mr. D. D. Hammelbaugh, Harrisburg.

President's Address—Our Association, Mr. Charles H. Meyer, Johnstown.

Annual Reports—Mr. W. T. Norton, McKeesport.

Duties of Secretaries of Third and Fourth Class Districts, Mr. F. L. Bensinger, Franklin.

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It is manufactured from pure vegetable oils exclusively and where it is used for cleaning floors a bright polished appearance will be obtained instead of the dull gray color which is so often caused by soaps containing an excess of alkali. Our soap can be used with the very best results for cleaning all woodwork, furniture, and finished surfaces. One of the most successful uses that it is now being put to in the schools is that of cleaning slate blackboards. The original black finish will be brought out to the best advantage, removing all chalk marks in the most thorough manner.



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Waste in the Public Schools, Mr. William Dick, Philadelphia.

Purchase of School Supplies, Dr. R. J. Yost, South Bethlehem.

General School Repairs, Mr. R. E. Peifer, Easton.

Wednesday Afternoon, February 7.

Reports of officers and committees and election of officers.

School Contracts, Mr. E. D. Fellows, Scranton.
Appraisal of School Property, Mr. T. P. Wenner, Allentown.

Uniform Financial Accounts of Districts of the Second and Third Class, Mr. D. D. Hammelbaugh, Harrisburg.

School Legislation, F. Reigen, Ford City.

Increase of School Indebtedness by Vote of the People, Mr. W. J. Flynn, Erie.

The Building Problem, Mr. G. W. Gerwig, Pittsburgh.

Tax Collections, Mr. A. W. Moss, Wilkesbarre.

Conferences of first and second class districts and third and fourth class districts will be held during the daily sessions.

Wednesday Evening, February 7.

Consideration of special subjects not touched upon in previous sessions.

TEACHERS' SALARIES.

Bridgeport, Conn. The school board has decided on a uniform raise of \$100 to \$150 for all teachers up to a maximum of \$1,250, depending on the nature and character of the work done.

The minimum wage of school teachers in North Baltimore, O., has been raised from \$40 to \$45 per month.

Wakefield, Mass. Increases in salaries of \$50 for all women teachers and \$100 for school principals and male teachers are asked in the school budget just submitted to the city council.

Springfield, Mass. The school board has raised the salaries of the high school principal, assistant principal, dean and librarian, and clerk, and also those of the grammar school principals.

Clifton, Ariz. The board has raised the salaries of the entire teaching corps 12½ per cent, the increase to be effective with the opening of the second term.



PLATE C-242



PLATE B-51



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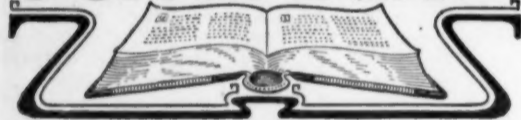
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SCHOOL LAW



Teachers.

Teacher's contract with school district *Held* terminated, and license to teach revoked, by notification to her and directors by county superintendent that her license had been revoked by the state superintendent after re-examination.—*Smith v. Farmers' Bank of Newport*, 188 S. W. 1167, Ark.

Under Kirby's Digest of Arkansas, § 7258, and the acts of 1911, p. 404, § 14, state superintendent of public instruction has power to revoke state wide licenses to teach school issued by him.—*Smith v. Farmers' Bank of Newport*, 188 S. W. 1167, Ark.

Where electors of school district, by vote at annual meeting, determine that school of more than three months shall be taught, contract of directors with party to teach common school for four months in winter is valid, tho executed before annual meeting.—*Brassfield v. Jones*, 188 S. W. 1181, Ark.

Where a city school superintendent was appointed under mistaken view of the law for a year's probationary period, but claimed a four-year tenure under Pol. Code, § 1792, subd. 2, the contract, having been made by the board of education under misapprehension, was void for reasons of public policy.—*Armstrong v. Board of Education of City of Vallejo*, 160 p. 414, Cal.

Pupils.

Under Hurd's revised statutes of Illinois for 1915-16, c. 122, § 127, requiring a sufficient number of free schools to accommodate all persons of school age in the district, inmates of an orphan's home in such district, having no other residence, *Held* entitled to free tuition in schools of district.—*Ashley v. Board of Education*, 114 N. E. 20, Ill.

Mandamus did not afford a complete and adequate remedy at law for action of board of education of school district in wrongfully excluding children, inmates of an orphan's asylum in the district, from free admission to public schools of district.—*Ashley v. Board of Education*, 114 N. E. 20, Ill.

A rule of the state board of health, making vaccination a condition of admission of scholars and teachers to public schools, promulgated by virtue of the Kentucky statutes, § 2049, giving state board of health general supervision of health matters, could be enforced by the county board of health and county health officer where there was a reasonable apprehension of an outbreak of smallpox.—*Hill v. Bickers*, 188 S. W. 766, Ky.

Even without a specific delegation of powers, local or administrative authorities having control of schools or general care of public health are justified by the existence of an emergency in making vaccination a condition for admission to the public schools, but unless such power is clearly conferred local bodies may not require vaccination in the absence of smallpox, or the apprehension of an immediate outbreak thereof.—*Hill v. Bickers*, 188 S. W. 766, Ky.

The legislature may by express provision, in the exercise of its police power, require or empower a local or administrative authority to require vaccination of children as a condition of their being admitted to the public schools, altho smallpox be not prevalent or its outbreak be not apprehended.—*Hill v. Bickers*, 188 S. W. 766, Ky.

Under an ordinance authorizing the board of education to adopt textbooks, and after five years to change them, the failure to adopt textbooks at the end of a five-year period does not prevent the board later from acting in the matter.—*Griggs v. Board of Education of Atlanta*, 90 S. E. 48, Ga.

Schools and School Districts.

The Illinois act of April 24, 1915 (laws of 1915, p. 630), validating elections for organization of school districts held under the act of June 5, 1911 (laws of 1911, p. 505), where votes for women were the deciding factor, *Held* valid.—*People v. Peltier*, 113 N. E. 856 Ill.

Under the Iowa Supplementary Code of 1913

(§ 2794a), where territory included in independent school district was situated in two counties, but land taken from district and incorporated in a new consolidated district was all in one county, approval of the consolidation by the superintendent of schools of such county alone was sufficient.—*Independent School Dist. of Switzer v. Gwinn*, 159 N. W. 687 Ia.

The formation of a consolidated independent school district, embracing territory transferred by one independent district to another after the filing of the petition for consolidation, is *Held* not void as leaving transferee district with less than statutory amount of territory.—*Independent School Dist. of Switzer v. Gwinn*, 159 N. W. 687 Ia.

School District Government.

The Texas revised statutes of 1911, art. 2773, requiring treasurers of school funds to make reports, embraces all treasurers of school funds, including the treasurer of an independent school district organized under article 2851.—*Hall v. State*, 188 S. W. 1002, Tex. Cr. App.

Under the Texas penal code of 1911, art. 3, a violation of the revised statutes of 1911, art. 4517, making it a misdemeanor to fail to make reports to the state superintendent, is not punishable because the penalty provisions are omitted from the civil and criminal statutes.—*Hall v. State*, 188 S. W. 1002, Tex. Cr. App.

School District Taxation.

Under the Kentucky statutes § 3595, as to estimates by boards of education in cities of the fourth class, it is *Held* that it was the duty of the board of education of the city to report to the council the amount of cash in its treasury in making its estimates for school expenses, and that the council in making the required levy could consider this amount.—*Board of Council of City of Winchester v. Board of Education of City of Winchester*, 188 S. W. 755, Ky.

An amount requested by the board of education for school purposes, being only an approximate estimate, a deficit of \$9.83 would not authorize an increase in the levy made by the council.—*Board of Council of the City of Winchester v. Board of Education of City of Winchester*, 188 S. W. 755, Ky.

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The Circuit Court of Cook County, Illinois, has sustained the demurrer of the city of Chicago, to the petition of a citizen, for an injunction to restrain the city from maintaining playgrounds on property adjacent to a school. The court held that playgrounds are to be considered a part of the city educational system.

The Appellate Court of Newark, Ohio, has rendered a decision in favor of the school board of Thorn Township, Licking County, in the recovery of tuition furnished children who lived in Licking Township but attended school in Thorn Township. The decision sustains the previous decision of the Court of Common Pleas.

Seventy-five per cent of the electors of any Ohio school district may command the County Board of Education to transfer certain territory of a school district to any other district, according to a recent decision of the Springfield Court of Appeals.

Thru a decision of the corporation counsel of Washington, D. C., the public use of school buildings for paid entertainments is denied. The practice is held to be contrary to law.

The state supreme court of Missouri has recently decided that August H. Kuhs shall pay back to the St. Louis Board of Education \$11,500 profit which he and his associates are alleged to have made in the sale of a piece of real estate to the school board. The transaction, upon which the court passed, was the sale of a high school site to the board of education for \$34,000. Kuhs was a member of the board at the time and arranged that his son and an associate in his office buy the piece of land which they later resold to the board.

Attorney General Attwill of Massachusetts has rendered an opinion in which he holds that a physician in issuing a certificate to a child for exemption from vaccination before being admitted to public schools, does not need to make a personal examination. It is held that the certificate need not be so worded as to give the opinion of the physician that the cause stated is sufficient.

The Michigan Supreme Court has reversed the decision of the lower court in the suit of Donald MacQueen against the city commission of Port Huron, and has granted the injunction restrain-

ing the city from disposing of \$100,000 in school bonds for the erection of a new school.

The lower court has previously held that the city had a legal right to dispose of the bonds and that the city charter did not conflict with the general school law as claimed.

An injunction has been denied the Citizens' protective Association of Rockford, Illinois, to enjoin the school board and health department from enforcing its rule excluding children not vaccinated from the schools. The court held that the association failed to show that any injustice, corruption or serious wrong had been done. The case was taken to the court when the Rockford board refused to admit unvaccinated children to classes.

The Supreme Court of Alabama has upheld the Law and Equity Court of Marengo County, holding that the school board may require vaccination before admitting children to classes. The school board of Demopolis had refused to permit a child to attend unless vaccinated. The lower court to which the case was referred, decided against the parent and the Supreme Court has affirmed its action.

EVENING SCHOOLS.

The Indiana Vocation Survey Committee, which recently made a survey of the schools of Evansville, in its final recommendations, urges that special evening courses in all trades be provided.

Lebanon, N. H. An evening school has been opened with an enrollment of sixty students.

Brainerd, Minn. An evening school has been opened with an enrollment of forty students. Three classes of persons are accommodated at the school.

Clinton, Ia. An evening class has been formed for the education of aliens in American citizenship.

Stillwater, Minn. An evening school has been opened for the education of foreigners in citizenship.

Calumet, Mich. Attendance at the evening school has reached 550, the largest number since the school was opened four years ago.

Buffalo, N. Y. Evening classes for non-English speaking foreigners have been opened in twelve schools. The graphic method of teaching is used.

Ashtabula, O. Manual training, mechanical drawing, domestic science and commercial subjects are offered in the evening schools.

Rice Lake, Wis. A night school has been opened.

Attleboro, Mass. Evening classes in jewelry designing and tool-making were opened in January.

West Warwick, R. I. An evening commercial course has been begun at the high school.

Portsmouth, N. H. An evening school has been opened.

Aberdeen, S. D. At a mass meeting held in the High School, December 13, it was resolved by the citizens of Aberdeen to extend to foreign born men and women residing in that city the opportunity to learn the English language and the rudiments of the system of government thru the medium of a free night school.

Tribute to a School Janitor.

The Newton, Kans., Republican for December 13 contained the following tribute to a school janitor:

Consider the story of Adam Graybill. For twenty-nine years he was janitor at one of the Newton school buildings. No public building is named in his honor; he gave the city no parks; none of the streets bears his name; he does not leave a fortune in money with which to endow colleges, or libraries. In fact Adam Graybill was barely known outside of his immediate circle of acquaintances here in his home town, and where he resided before. But on the day he was laid to rest, the largest ward school in the city was dismissed and the teachers and hundreds of children went to take a last look at the kindly face, and to pay homage at the bier that contained a heart that placed duty above honors, service above riches, integrity above earthly reward. He was a man who feared God in the sense that to do wrong is a sin against his maker, that sinfulness is a crime against his manhood, a stumbling block in the way of the youth with whom he was so closely associated. It can truthfully be said of him that no man speaketh evil of him, and his work was well and faithfully done. His place was well filled, and in that his example is invaluable to the world. Blessed be his memory.

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Would you specify wood doors, wood gratings, and wood dampers for stoves and furnaces?

Would a stove or furnace thus equipped be fire-proof, safe, or of any practical value?

Would you use any wood whatsoever in the construction of a stove or furnace?

Then why specify wood doors and trim for a building and then call that building "FIREPROOF?"

The interior trim of a fireproof building should be as fireproof as the walls, floors, and ceilings, and of the best quality material obtainable. If this isn't done, then the building is not fireproof.

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are quality products of proven superiority. They have stood the tests of the two greatest destructive forces known to mankind—FIRE and TIME.

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Building and Finance

THE BOSTON FINANCE COMMISSION REPORT.

Radical changes in the Boston, Mass., school system have been recommended in the report of the finance commission to the mayor of the city. In addition to advising the centering of executive responsibility in the superintendent and giving the assistant superintendents less power and smaller salaries, it recommends the standardizing of salaries of high school teachers and masters, and the establishment of a junior high school system which shall comprise the seventh and eighth grades of the elementary schools and the freshman year of the high schools. The recommendations are, to a great extent, in line with those made by the special survey committee of nine who reported their findings some months ago.

The commission in its report severely criticizes the reply of the board of assistant superintendents to the recommendations of the survey committee. It recommends that the superintendents be reduced in salary from \$5,496 to \$4,500 each, and that they be reduced in number from five to three, effecting a salary saving of nearly \$14,000. The commission is of the opinion that Supt. Dyer's salary is too high. While it would not ask the board to be penny wise and pound foolish, it recommends that at the expiration of the present term of service, the question of the superintendent's salary be carefully studied.

The other recommendations are as follows:

"Save \$45,000 a year or more by supervision of the elementary school system, with a view to eliminating present conditions, which allow more masters and sub-masters in small districts than are provided in larger districts.

"Study the actual necessity of 'heads of departments' in high schools where there has been decreased attendance in these special departments.

"That a proper quota of pupils in special classes be established by the school committee and that the special classes be grouped in one school as often as practicable.

"That men junior assistants, when appointed junior masters, be given an increase of \$144 a year instead of the present lump sum of \$576, until their maximum is reached.

"That the salaries of masters of high schools be recast, so as to provide within minimum and maximum limits compensation on the basis of pupils in average attendance in schools.

"That the ratio of one doctor to two nurses be adopted by the school committee in providing medical inspection for pupils.

"That the school committee direct the director of school hygiene to have a further special examination made of the children in the schools to discover pupils with defective hearing and that they be transferred to the Horace Mann School.

"That classes for children with speech defects be extended as early as practicable by the school committee.

"That consideration be given to the recommendation of the survey committee that practice teachers from private kindergartens be allowed to serve as special assistants in overcrowded kindergarten rooms."

BUILDING AND FINANCE.

Philadelphia, Pa. The first community center has been opened with the occupation of the new Kearny School. The center is to be built up by people of the neighborhood and is to be under

the direction of a paid secretary. Classes in embroidery, art, music, drama, sewing, and cooking will be formed. There will also be a reading room and opportunities for athletics and community dancing.

Lynn, Mass. Social center classes in sewing, basketry, carpentry, cane seating and other useful employments have been formed. The board contributes the room, janitor service, heating and lighting and the supervision is provided by the women's clubs.

Cleveland, O. The department of research and reference of the board has completed a survey of the classroom accommodations. The survey sought to learn whether there are any vacant seats in classrooms and whether congestion exists. Opinions of teachers on lighting, ventilation and flooring conditions were asked.

Austin, Tex. Practically the entire sum of \$500,000 which became available September 1, 1916, under the rural school law, has been apportioned by the state board. The state aid apportionment amounts to \$480,000 distributed to 1,436 rural schools in 174 counties of the state, leaving \$20,000 still to be apportioned.

The board has granted state aid to a number of high schools for the establishment of departments in domestic science, manual training and agriculture.

Peoria, Ill. Plans for the introduction of an entirely new style of school building and the creation of larger districts from many of the smaller districts have been outlined by Mr. H. T. Beasley, chairman of the building committee of the board. It is planned to have all future buildings of the one-story type and designed to accommodate from one thousand to 1,200 pupils.

The building committee has already taken action toward the purchase of a piece of land upon which will be erected a large building to replace two small ones.

In the opinion of Mr. Beasley, it is poor policy for a city like Peoria to erect small buildings because of the increased cost, janitor service and overhead expense.

Salt Lake City, Utah. The installation of either telephones or fire alarm boxes in all school

building recent of the fire able bec in repor

Denve the anti of exten tion of accordin ment ch

A tent \$1,000,00 ings and creased improv and adm tems, ad the suppl

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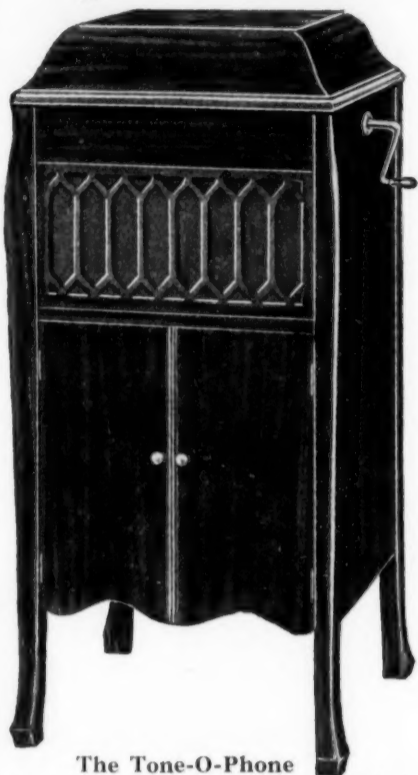
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\$54.⁰⁰ A Paper Baler Will Buy \$12.⁵⁰ A Tone-O-Phone



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A PRACTICAL LESSON IN THRIFT.

(Reprinted from the January issue of the School Board Journal).

The schools of Washington, D. C., have for a number of years raised funds for playgrounds and vacation schools thru the collection and sale of old newspapers and magazines. In view of the recent shortage of paper thruout the country, one of the local daily newspapers suggested that the school children begin the systematic collection of newspapers. It was agreed that the entire proceeds should be turned over to the schools for such use as they might determine.

Altho the plan was taken up by the children, interest in it was not limited to them alone but spread to the parents and to the school and public organizations. The requests of the pupils brought immediate responses in the way of old paper and magazines which had been stored and in the donation of current papers not in regular use. During the five weeks of the campaign, the total collection was 266,081 pounds of paper with proceeds of \$1,568.07.

The campaign has taught the city a very definite lesson in thrift and it is felt that this fact alone is worth more than the money consideration.



With each baler we furnish, free, one hook for handling bales, one time saving tamper, one lever for screw and wire for baling 1,000 lbs. of paper. The baler is made in three sizes. Write for catalogue.

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School Furnishers

buildings for fire protection is required by a recent ordinance of the city. In the opinion of the fire department, the alarm boxes are preferable because of their promptness and reliability in reporting fires.

Denver, Colo. The abandonment of some of the antiquated school buildings and the making of extensive repairs on others is the only solution of the problem of adequate fire protection, according to a recent report of the fire department chief.

A tentative budget calling for a bond issue of \$1,000,000 for the reconstruction of old buildings and the erection of new ones has been increased to \$1,250,000 by the board. Among the improvements planned are a new trades school and administration building, new sanitary systems, additions to four schools, an addition for the supply house, and a new high school.

An increase from \$16.22 to \$17.02 in average expenditure per pupil per annum is indicated for the public schools of South Carolina in a comparison between this year and last which State Supt. J. E. Swearingen has prepared.

Immediate steps for remedying defects in fire safety in the schools of New York City are to be taken by the board of education. An appeal has been made to the Mayor to veto certain cuts which the board of aldermen have ordered, making it possible to eliminate fire hazards.

Of vital importance to the problem, in the opinion of the school authorities, are the creation of the two offices of executive manager and supervising engineer recommended by the board in the 1917 budget. The employment of a supervising engineer would make it possible to carry out the most urgent recommendations of the fire commission concerning school housekeeping. The work of these offices while of a broad, general nature bears directly upon the vast amount of work yet to be done in complying with the fire safety code.

The Committee on Buildings has requested \$250,000 with which to make a number of structural changes in the schools ordered by the fire department.

The public school system of Birmingham, Ala., has been operated at a net saving of \$4,587.52

during the past year, as compared with the previous year, according to the report of the secretary of the board. During the past year the largest increase was for expenses in connection with repairs to existing buildings. In operating expenses, the savings were \$23,185.96. Several expenditures for permanent improvements in the way of new sites, buildings and equipment have reduced the net savings to a little more than \$4,500. This saving has been possible despite the fact that two schools have been opened, the running expenses of which amounted to \$3,182 and \$4,391 respectively, or a total of \$7,573.

In per capita expenditure for education, Utah leads all the other states, according to a recent government bulletin. Utah spends an average of \$10.07 per capita for her educational work, while Mississippi, which is the lowest in the scale of states, spends \$1.48. Idaho spends \$9.66 per capita and North Dakota \$9.62.

The Maine State Board of Education has asked the legislature for an appropriation of \$751,990 for 1917 and \$722,690 for 1918. Included in the estimates are \$145,000 for each of the years 1917 and 1918 for free high schools, \$26,000 for academies, \$86,000 for superintendence of towns comprising school unions, \$110,000 for normal schools, \$60,000 for industrial education, \$27,000 for teachers' pensions and \$27,500 for the schooling of children in unorganized townships.

Peoria, Ill. Social centers have been opened in four school buildings. A superintendent is in charge.

It costs \$41 per pupil to educate children in the public schools of Illinois according to State Supt. F. G. Blair. There are 1,084,640 or 76.6 per cent of the children of school age enrolled in public schools. The total value of school buildings, sites and equipment is \$135,356,997. The total salary roll for teachers is \$25,510,484.

TEACHERS AND ADMINISTRATION.

The Michigan Supreme Court has upheld the validity of the teachers' retirement fund law. The law provides that teachers shall pay a portion of their salary into a state fund. After thirty years' service, teachers may retire and draw salaries ranging from \$350 to \$500 annually.

The law is compulsory, teachers being brought under it automatically upon signing a contract to teach.

The Utah State Board of Education has adopted a rule providing that any teacher with a certificate, who signs a contract to teach in the state and then contracts to teach in another state, is thereby barred from teaching in Utah. The rule became necessary when teachers who held contracts to teach in Utah, proceeded to sign others in neighboring states.

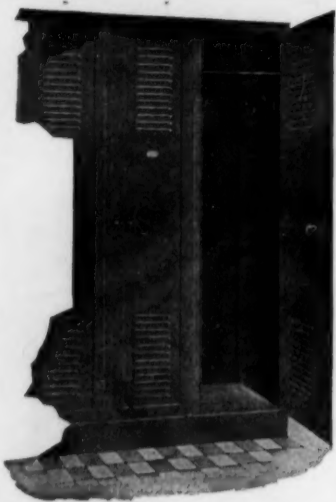
The trustees of the Minnesota Teachers' Pension and Retirement Fund have decided to continue the eighty per cent basis in annuities payable January first. About \$10,000 have been distributed among 115 retired teachers in the first regular quarterly annuity disbursement. Nine teachers with a teaching service of from 23 to 27 years, have been retired.

Washington, D. C. With a vote of more than one thousand, the teachers have approved the provisions of the present retirement bill. The bill has already been presented to the Senate and the House of Representatives.

Philadelphia, Pa. More than one thousand teachers have taken supplemental instruction of some form to improve their teaching efficiency, according to Supt. John P. Garber. Most of the work is taken at the State University and at Temple University. Some courses are also given under the auspices of the Philadelphia Teachers' Association, the Schoolmasters' Club and the Teachers' Institute.

Columbus, O. Life high school certificates without examination have been granted to a large number of teachers, and to a small number of elementary teachers, under the provisions of the new school code.

Minneapolis, Minn. Work of assistant or cadet teachers in the public schools has compared well with that of experienced teachers, in the opinion of Supt. F. E. Spaulding. Dr. Spaulding declares that they are not only giving satisfactory service but their employment has meant a material saving to the city. Assistant teachers are paid \$600 the first year. Special supervision ceases after the first year and their salaries advance \$75 yearly thereafter.



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This Locker is especially adapted for school use. Helps to keep the children's clothes in a clean orderly condition. Insures promptness, neatness, and is a factor in the prevention of contagious diseases.

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will surely meet with your approval. We could say they are exactly what you are looking for, but how should we know? How do you know, unless you see the locker? This is what we will do. Send you a sample locker, "Free of Charge." All we ask you to do, is to examine the construction, finish, re-enforced corners, locks, and pivot hinges. Then return the locker to us, all at our expense. Simply drop us a post-card—we'll do the rest.

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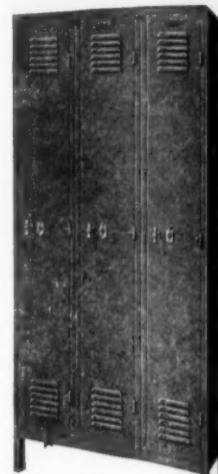
ADDITIONAL winter wardrobe means additional opportunity for the spreading of contagion in the cloak-room. By providing

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PERSONAL NEWS OF SUPERINTENDENTS.

Supt. DeForest H. Perkins of Portland, Me., has been re-elected and his salary raised to \$3,050.

Dr. James M. Taylor, president emeritus of Vassar College, died at his home in New York City at the age of 68. Dr. Taylor was educated in the Brooklyn (N. Y.) schools, was a graduate of the University of Rochester and the Rochester Theological Seminary. During the 27 years of his presidency, Dr. Taylor saw Vassar grow from 291 students to more than a thousand, and its equipment as well as its influence vastly increased.

Frank W. Wright, superintendent of schools at Uniontown, Pa., has resigned to accept the position of Deputy Commissioner of Education for the state of Massachusetts. Mr. Wright is a graduate of Westminster College and of Harvard University. He has been superintendent at Uniontown for the past three years.

Dr. Herbert F. Fisk, proprietor and director of the Chicago office of the Fisk Teachers' Agency since 1905, died December 20th at his home in Evanston, Ill. Dr. Fisk was a graduate of Wesleyan University. From 1873 to 1904 he was principal of Evanston Academy of Northwestern University and was professor of education at the University for a number of years. Dr. Fisk is survived by a wife and two daughters.

Mr. E. E. Olp, who has acted as manager of the Fisk Teachers' Agency of Chicago, for many years, has become president of the agency as well as manager.

Walter Balfour Gunnison, author of Latin textbooks, and principal of the Erasmus High School, Brooklyn, died on December 19th at his home in New York City. Mr. Gunnison was a graduate of Lawrence University and at one time practiced law at Madison, Wis. In 1896 he was appointed principal of the Erasmus High School.

Supt. Carey Boggess, of Springfield, Ohio, is to leave school work at the end of this year, to become attorney for the Provident Savings and Loan Association of that city.

Mr. Boggess' school career in Springfield began in 1883 when he entered upon his work on the

teaching corps. In 1894 he was elected superintendent. His term of continuous service is the longest among Ohio superintendents of the larger cities. Buildings, teachers and enrollment have doubled during his incumbency.

Mr. L. N. Hines, superintendent of schools at Crawfordsville, Ind., has acquired an interest in the Educator-Journal, the state teachers' paper of Indiana. Mr. Hines has been a contributing editor of the publication for some years, and will now become actively its editor. He will have associated with him, Mr. M. P. Helm who has managed the business affairs of the paper for some time.

Mr. Orwin Bradford Griffin has been appointed Jacob Sleeper Fellow at Boston University. The fellowship is the highest academic honor conferred by the university and carries a cash prize of \$500. Mr. Griffin is a teacher at the High School of Portsmouth, N. H.

Mr. W. R. Hatfield of Chicago, has been elected president of the Illinois State Teachers' Association, to succeed Gerard T. Smith. Other officers elected are: Chas. M. MacIntosh, Monticello, treasurer; D. Walter Potts, East St. Louis, executive committee; R. O. Stoops, Joliet, director. Robert C. Moore of Carlinville is secretary.

Mr. W. N. Taylor, formerly assistant superintendent of education of Mississippi, has been appointed head of the new agricultural high school just opened in Hinds County. The building is centrally located near Jackson, and will have an important part in the rural education of the state.

Mr. William B. Guild, a trustee of Wheaton College for twenty years, died at his home on December 25th. Mr. Guild was president of the Wheaton board of education for nine years.

Mr. J. G. Ferguson has been appointed Deputy Superintendent of Education for the state of Arkansas. Mr. Ferguson is a graduate of Valparaiso University and attended the law school at Little Rock.

Supt. John F. Hogan of DePere, Wis., has resigned to accept a position with the Laurel Book Company of Chicago. Mr. Hogan will travel in Missouri.

Mr. A. J. Jolly, superintendent of the Augusta high schools, Augusta, Ky., has resigned.

Mr. Joseph I. Horton, for sixteen years principal of the high school at Somerville, Mass., has resigned to become superintendent of schools at Ipswich. Mr. Horton who was at one time principal of the grammar school, was tendered a reception by his former pupils and was presented with a gold watch and chain.

Brockton, Mass. The salary of Supt. John F. Scully has been raised from \$3,500 to \$3,600.

Mr. Edwin Roberts, assistant superintendent of the Cincinnati schools, has been re-elected president of the Public School Athletic League.

George W. Kendrick, former superintendent of schools at Leavenworth, Kansas, died December 5th at Wichita.

Supt. G. H. Sanberg of Crookston, Minn., has been re-elected for a fourth term and his salary raised to \$2,700. During the past year a department of health has been added to the school system and a supervisor of penmanship employed. It is planned to employ a physical culture instructor to devote his time to corrective work among pupils.

Mr. John K. Fenner has been elected superintendent of schools at Cranston, R. I., to succeed Wm. C. Hobbs.

Supt. John Dietrich has been re-elected head of the schools at Helena, Mont.

HIS FIRST TEACHING POSITION.

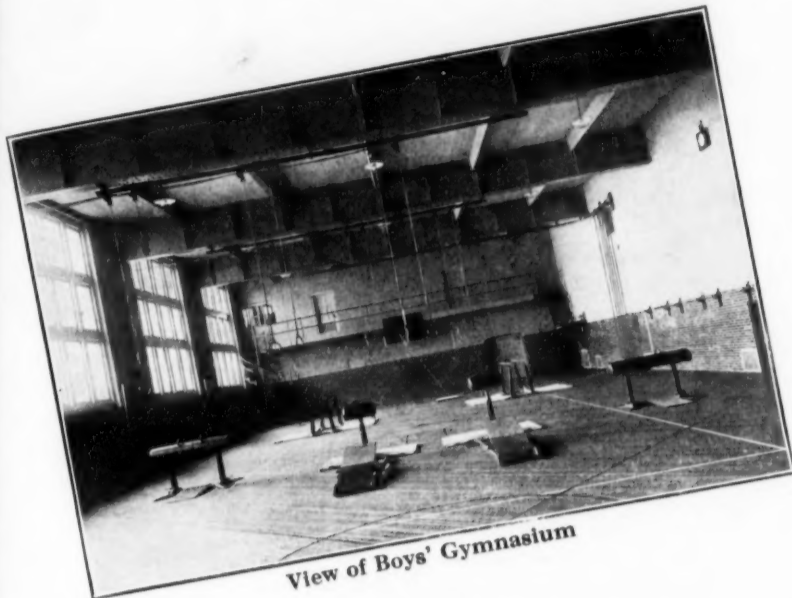
The minutes of the Commissioners of the Winston Graded School for October 13, 1884, contain the following entry:

"There being a pressing need of another male teacher in the white school, and Prof. Tomlinson having been requested to recommend a suitable man at the last meeting, offered the name of Mr. J. Y. Joyner as qualified for the position. A letter was also read from Mr. Joyner, stating his desire to live in Winston and his willingness to teach for \$60 per month, and to enter at once on duty. On motion Mr. Joyner was unanimously elected."

Mr. Joyner has been chief school executive of the state of North Carolina since 1902 and has gained a nation wide reputation for his labors in behalf of education in the South.

THE NEW WASHINGTON, D. C., HIGH SCHOOLS

USED MEDART GYMNASIUM APPARATUS AND STEEL LOCKERS EXCLUSIVELY



View of Boys' Gymnasium



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in Gymnasium and Locker Equipment it is not an uncommon practice to specify **MEDART PRODUCTS** as a standard for quality. Such specifications provide for the *best possible service* as well as efficient equipment.

Our Engineering Department is at the service of School Boards planning buildings with Locker Rooms, Gymnasiums or Swimming Pools. There are some features of construction which we have made the subject of considerable thought and study with a view of developing Gymnasium and Locker Equipments to the highest standard of efficiency.

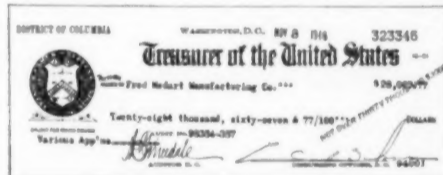
Our book, "The Planning of a Gymnasium," covers the subject of Gymnasium and Locker Room construction and equipment in a general way and will be mailed free to school officials contemplating new buildings.

Our catalogs "K" of Gymnastic Apparatus, and "A4" of Steel Lockers are mailed free on request. Our booklet "The New Sanitary Locker System" describes the locker system installed in the Washington, D. C., High Schools, the Kansas City, Mo., High Schools, the New Haven, Conn., High Schools, as well as many others.



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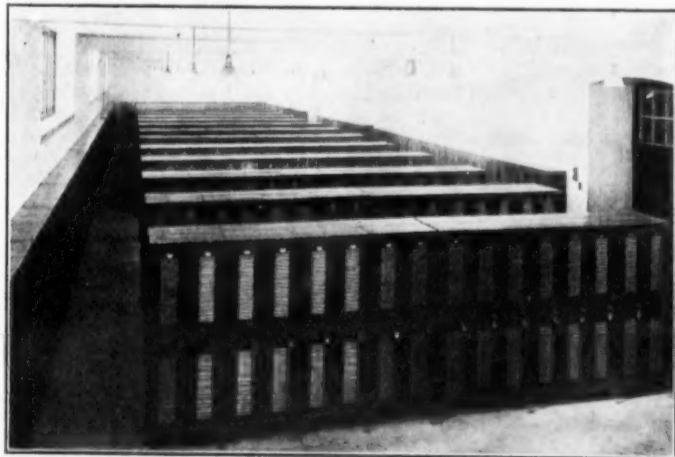
Send for the literature in which you are interested and when ready to consider Gymnasium or Locker Equipment let us assist you with your plans.



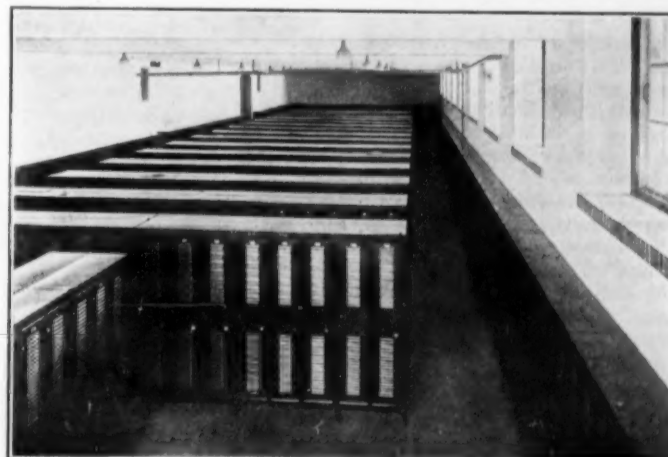
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Sanitary Locker System Laundry Machinery



View of Boys' Locker Room



View of Girls' Locker Room

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HIGH SCHOOL ADMINISTRATION.

Chicago, Ill. President Jacob Loeb of the board has appointed a commission of ten to have charge of the military training in high schools. One of the first duties of the commission will be the raising of funds to equip twenty high schools for this work.

Haverhill, Mass. The high school employment bureau has been kept busy during the past school term supplying businessmen with pupils who desire work after school and on Saturdays. During the holiday season, a number of pupils were able to find employment in department stores thru the efforts of the bureau.

Malden, Mass. The board has ruled that girl students of the high school who refuse to take physical culture, will be denied diplomas of graduation.

El Paso, Tex. A number of changes in the management of student activities in the Forest Avenue High School have been adopted to permit of better managing authority and more adequate guidance by the school faculty.

The rules provide that all proposed student formations shall be passed upon by the faculty before they may be recognized. Any club, society or other endeavor which seeks to organize, must first make out a petition, giving the names of the proposed membership, an outline of the constitution and other facts to satisfy the faculty of their good intentions. The business details have been placed in the hands of a producing and advertising manager, leaving the general work to the other officers of the society.

Saugus, Mass. A general reorganization of the school system is planned with the completion and occupation of the new Junior High School. It is planned to have a six-hour day for both the Junior and Senior High School, sessions beginning at 8:45 A. M. and closing at 2:45 P. M.

Davenport, Ia. The board plans the opening of an intermediate building to take care of students in the seventh and eighth grades and the first-year class of the high school.

Macomb, Ill. The board has fixed the tuition rate for non-resident students at \$25 per year.

Lynn, Mass. The Junior High School plan is to be introduced as soon as courses of study, buildings and teachers can be provided. The work is to be planned and carried out by Supt. Charles S. Jackson.

Enrollment figures for the six largest high schools of Chicago show that Lane Technical High School stands at the head of the list, even exceeding that of Senn High School which last year had 2,354 pupils. The following is the enrollment for the year 1916:

Lane, 2,560 pupils; Senn, 2,534; Englewood, 2,114; Harrison, 2,412; Hyde Park, 2,475; Schurz, 2,453.

Typists in the commercial department of the Oshkosh (Wis.) High School, rank fourth in the United States and first in Wisconsin, according to awards recently made in typewriting competitions.

Albert Conger of Buffalo, N. Y., and formerly of Springville, has given \$2,000 to the school board of union free district No. 1 of Concord, to be used for the benefit of students who may desire to enter some college upon graduation from the local institute.

At the recent annual session of the New York State Examination Board, Commissioner John H. Finley recommended that high school courses be reduced from four to three years, and that another year's study be added to the elementary course. The matter will be referred to the State Board of Regents which has authority to make changes.

To ascertain the success of the supervised study plan as operated in the high schools of the country, Supt. S. H. Simmons of Antigo, Wis., recently sent out a questionnaire to a number of school superintendents. The replies show that the following schools are using this plan: River Falls, Wis.; Edgerton, Wis.; Marshfield, Wis.; South Milwaukee, Wis.; University of Wisconsin High School; Racine, Wis.; Rochester, Minn.; Faribault, Minn.; Minneapolis, Minn.; Cadillac, Mich.; Gwinn, Mich.; Marshall, Mich.; Menominee, Mich.; Three Rivers, Mich.; Lansing, Mich.; Mt. Clemens, Mich.; Marquette, Mich.; two in Chicago; two in Denver, Colo.; Cedar Rapids, Ia.;

Cleveland, O.; Toledo, O.; Brooklyn, N. Y.; Newark, N. J.; Pittsburgh, Pa.; Seattle, Wash.

In the East High School at Green Bay, Wis., the plan has been tried with the freshmen students only, but the failures since then have been fewer and the plan worked successfully. In Negaunee, Mich., it was the declaration that the plan works better the longer it is in use. In Menominee, Mich., the plan has resulted in better grades, a higher standard of scholarship and more intelligent study and application. In the Broadway High School, Seattle, Wash., it is the opinion that the plan lends itself more readily to older pupils, while in the Houghton, Mich., High School it is stated the plan is "far superior to the old method."

The supervised study plan has been on trial in the Antigo High School and the present study was begun to determine whether its general success warranted its permanent use in the school.

Pendleton, Ore. A voluntary military training course has been introduced in the high school. At present there are 80 boys taking the course and 60 have signed up for a full course. Credit will be given for the work. Sergeant Young of the local U. S. Marine Corps recruiting station has charge of the work. All boys joining the work are pledged not to enlist until their full growth and education have been completed, unless in case of actual danger due to a foreign invasion.

The school board at Heron Lake, Minn., has raised the salary of the superintendent and teachers. The increases were given in recognition of the high cost of living and do not interfere with the regular salary schedule.

Philadelphia, Pa. The school board has adopted a rule requiring all teachers to register in the office at least twenty minutes before the opening of school.

The Circuit Court of Ransom County, North Dakota, has upheld the constitutionality of the teachers' retirement fund. Suit was brought when the board trustees of Ransom refused to pay to the state superintendent the county's share of the fund.

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"H-C" Class Room Buzzer

An ideal signal for the classroom.

Metal case—Dust-proof—Enclosed terminals—Triple silver contacts—Agreeable tone, low but penetrating. Black finish.

"H-C" Corridor Bell

Metal case—Dust-proof—Enclosed terminals—Triple silver contacts—Loud, clear tone, can easily be heard above noise in corridors. Black finish.

"H-C" Yard Gong

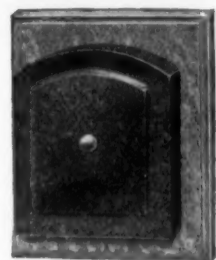
Specially designed for outdoor use—Absolutely watertight—Mounted on heavy mat, with hood and guard as a protection against missiles and to prevent birds nesting.

Holtzer Cabot Bells have been specified for years as standard for Program Clock Systems.

They have stood the test of time. Send for New Bulletin 15S1. Just out.

The Holtzer-Cabot Electric Co.

BOSTON and CHICAGO





WHEN YOU ARE IN KANSAS CITY ATTENDING THE CONVENTION
be sure to visit the Northeast High School. In this most modern School Building you will find the

JOHNSON SYSTEM
Of Temperature Regulation and Humidity Control

Our system increases efficiency in the schoolroom—promotes health and makes it easier for the pupils to study. No overheated rooms, no need to raise the windows allowing a draft. Where the Johnson System is installed an even temperature is always maintained.

Other schools in Kansas City where the Johnson System is installed are
Central High School Swinney School Mark Twain School
Greenwood School Clay School
Ashland School Milton Moore School

JOHNSON SERVICE COMPANY, Milwaukee, Wis.
Kansas City Office: 411 East Tenth Street

SCHOOL ADMINISTRATION

**CO-OPERATION OF SCHOOL AND HOME
AT DU BOIS, PA.**

To permit parents to keep in touch with the work of students, the high school at DuBois, Pa., sends out regularly, form blanks on which are noted the subjects in which the student is deficient. The form also contains instructions to parents concerning regular attendance, punctuality and other things that make for good school work and mental poise.

The blank is reproduced below:

DuBois High School.

Mr.
This is to inform you that.....
has been doing unsatisfactory work in the following subjects for the past..... viz:—

You should endeavor to have h.... improve these grades before the semester is so far spent that the work can no longer be made up.

A WORD TO PARENTS.

The best results are reached in education when parents and teachers both make an earnest and concerted effort. This is particularly true under our present high school organization, because the pupils are under the control of their parents a greater portion of the time than formerly, and under that of the school correspondingly less.

DUTIES OF PARENTS.

You should know that your children attend school regularly. Frequent absence is ruinous to school work. Parents are urged not to permit absence except for unavoidable causes. Tardiness is almost invariably inexcusable. The pupil should be as punctual at school as he would expect to be in a business position. Anything short of this means inefficiency and perhaps failure.

You should know at what time your children are due in school each day and also that they are

spending their time well when not in school. That you may know when is due in school, h.... time schedule is given below. If you wish h.... to have more time for study at the high school, this may be had to a limited degree, for the asking.

Pupils who have few or no periods for study at the high school should do correspondingly more home work. No pupil may reasonably hope to succeed in high school work, unless he spends at least four hours in home work daily. Pupils who spend nearly the whole day at the high school may succeed on a little less. If less time than this is devoted to study, parents may know that satisfactory progress is not being made. A suitable place for study should be provided and parents should see that the hours for study are regularly observed.

Unless it is absolutely necessary pupils should not be permitted to take employment during the school session. Experience shows that few pupils are successful in their school work when they give of their time to distracting employment.

TIME	SUBJECTS	Recite		Study	
		Day of Week	Room	Day of Week	Room
8:30					
9:22					
10:12					
11:00					
1:15					
2:07					
2:57					
3:47					
to					
4:35					

PRINCIPAL.

Parents should not allow pupils to make social engagements for the evenings immediately pre-

ceding school days. Late hours and the diversion of the pupils' interests will inevitably result and school work will be neglected. A tired and irritable disposition unfits anyone for the finer adjustments necessary in learning.

The greatest incentive pupils may have toward good school work is a high appreciation of the value of their courses of study. Parents may stimulate this interest by helping their children to see the greater value in their courses, or they may deaden this interest thru ill-advised discussions. Perhaps it would be well for all of us, in our thinking concerning relative educational values, to think occasionally of the studies pursued by the masters of literature and science in times past, in the hope that we may better appreciate our own educational advantages.

TEACHING EFFICIENCY.

Supt. Elmer S. Redman of Port Chester, N. Y., has recently issued a series of bulletins on teaching efficiency for the benefit of the teaching staff.

Of special interest is that relating to the personality of the model teacher. In dealing with this phase of the subject, Mr. Redman names in order, twelve points, including voice, dress, manners, conduct, habits of work, self-control, inspiration, leadership, executive ability, co-operation, common sense and attitude toward work.

Voice—It is assumed that the teacher's voice will be well modulated, clear and winning. The words must be well articulated, clearly enunciated and correctly pronounced.

Dress—The dress should be neat and in good taste. It should be inconspicuous and appropriate for the schoolroom.

Manners—The teacher's manners should be natural and habitual expressions of the cultured and courteous lady or gentleman. They should not be put on or off for different occasions.

Conduct—The teacher's character should be sound as indicated by irreproachable actions reflecting high ideals and purposes.

Habits of Work—The teacher should be systematic, accurate, prompt, cheerful and masterful in thought and action.

Self-Control—In every relation the teacher

Gold Medal Crayons

"For Every Use"

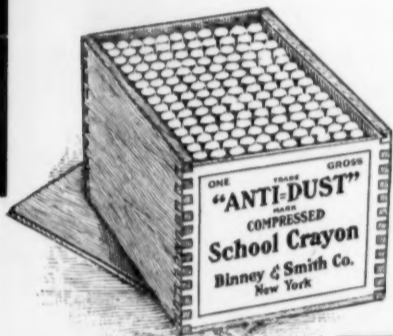
Made from best material,
by skilled labor and
up-to-date machinery

BETTER THAN THE BEST

Try Them -- Be Convinced

"Anti-Dust"
The School Favorite

Write for Catalog and
Samples of Entire Line



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Makers
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should show ease and poise and a judicial, firm and thoughtful attitude.

Inspirational Force—The teacher should be strong in encouraging, in thought-provoking, in ambition-arousing, in growth-promoting, and in success-inspiring action.

Leadership—This quality should be evident in stimulating, co-operation-inducing, self-controlled actions leading toward character formation.

Executive Ability—This should be evident in power of initiative, in vigorous and resourceful action. The teacher should be able to think, plan and follow instructions and to get results with a minimum of waste and friction.

Co operation—The teacher should show a loyal, frank, kind, sympathetic and helpful attitude and should appreciate the value of team work. There should be a willingness to assume responsibility and a readiness to give suggestions for improvements.

Common Sense—This should be evident in the personal conduct of the teacher; in discussing school matters; in retailing general gossip; in conforming to the customs of the community and in a saving sense of humor.

Attitude—The teacher should be optimistic in outlook and enthusiastic in work. She should respect and support the superintendent, trust the principal, like her associates, love her pupils, see the bright side of things, smile and radiate sunshine, good cheer, happiness and success.

The Cleveland School, Newark, N. J., which is operated on the Gary plan, is not excessive in financial upkeep but has actually saved the city \$8,182 according to a recent report of Principal E. S. Pitkin. The figures have been submitted in reply to a charge of extravagance made against the school by a citizen.

In refuting the charge that the Cleveland school reached an increased cost of \$15,000 in a year, Mr. Pitkin said:

"In my school there are 27 grammar classes, and these, on the time schedule, under the old plan, would require for shop, domestic science and gymnasium teaching, the full time of three teachers and the half-time of one. As there are fifteen of these special or shop teachers in Cleveland School now, the greatest excess cost of in-

struction is the difference between fifteen and three and one-half, leaving us eleven and one-half teachers to account for. Of these, eight are drawing, sewing, science or women physical training teachers, whose maximum salary is \$1,300. The excess cost of these over the primary teachers whom they displaced is \$1,600."

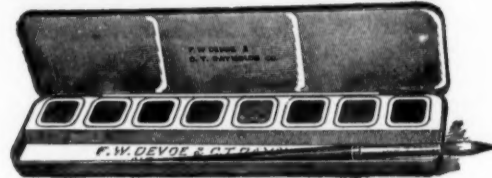
Continuing his estimate of the teaching cost, Mr. Pitkin added to this amount the cost of the men teachers of electricity, manual training and physical training, amounting to \$2,100, and the cost of an assistant clerk required since his school's organization. In all there was a total excess cost for teaching of \$4,430. The excessive cost of supplies is misleading as the cost of materials should be charged off as equipment. Much in the way of tools and other equipment is made by pupils who have thus transformed materials into equipment.

For instance, booths in the electrical room and such tools as cutting pliers, 24 of which have been made by the boys (these would have cost \$1 each); planes, screwdrivers, saws and many other things are shown. There is an electrical room for which, in fitting it up, the only purchases made were eight pounds of copper wire, two dozen electric bells and 25 push-buttons.

All this would reduce the per capita excess cost for supplies to fifty cents, Mr. Pitkin declared, and basing this on the present enrollment of 2,200, would give a total excess in this department of \$1,100, making for this item and excess teaching cost a total excess of \$5,530. The principal explains that this amount is more than balanced by the saving of the duplicate school plan. At this point he states, however, that he would never advocate a real duplication of classes, fifty per cent increase of housing capacity being all that could be efficiently handled.

The Cleveland building now is carrying sixteen more classes than it was built to accommodate and could handle one more, Mr. Pitkin claims, admitting that these classes should not be estimated at more than 42 pupils each, the official estimates are based on forty-eight. He balances against Cleveland's excess cost an estimate on a sixteen-room building which would be required if Cleveland school were not carrying

GET your pupils to use Devoe School Water Colors, if you want them to do the best possible work.



Devoe School Water Color Box No. 118

These colors are true, of unusual strength and uniform; also inexpensive.



Devoe School Water Color Box No. 122

Made in Cakes, half pans and tubes.

Complete catalog of school art material may be had by writing Dept. 5.

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more classes than it is supposed to accommodate. These are: Cost of building, with site and furniture, at least \$144,000. On this, as maintenance charges, not counting teachers' salaries or interest charges, \$6,480; sinking fund charges, \$2,880; minimum principal's salary, \$2,000; janitor's salary, based on last annual report, \$1,387.60; fuel, light and water, \$716.80; repairs, \$249; making a total of \$13,712. From this Mr. Pitkin deducts what he terms "the greatest possible excess cost of instruction and supplies," the \$5,530 previously given, leaving as Cleveland's saving to the city, \$8,182.

Mr. Pitkin upholds many educational points, denying the charge that pupils are not afforded the quiet necessary for concentrated thinking. There are quiet classrooms and a lack of confusion throughout. Happy, industrious pupils accomplish their tasks with much earnestness and with a minimum loss of time in passage from one occupation to another.

WELCOMES CRITICISM.

Mr. William McAndrew, Associate Superintendent of the New York City schools, is an original thinker and an apt commentator on educational affairs. If he occasionally takes an entirely opposite view of a situation to that commonly held by his associates, he is not sneered at but listened to with respect. Thus, he recently discussed the subject, "Knocking the Schools" by suggesting to educators that they welcome rather than discourage any unfavorable publicity given to themselves and their work. He said, in part:

"The Teachers' Council of this city has recently issued a report upon the product of the public schools. It says that over 22 per cent of the graduates are not able to do successfully the work of the next higher grade. The Council report analyzes the deficiencies: Lack of ability in English 90 per cent, in concentration 90 per cent, in independence of thought and action 53 per cent, in arithmetic 16 per cent, in physical condition 4 per cent. These details are more suggestive of corrective treatment than many of the advertised criticisms emanating from the general public. The objections selected from the more prominent outside critics are phrased like this:

"The thing. wofully petent."

"The must. opportu cellent. Every statemen is turn editor fact on delivers graduat not spel tions of news v the prin call up."

"This statemen the grac write, s lunge to come an 198, and come, w test ther."

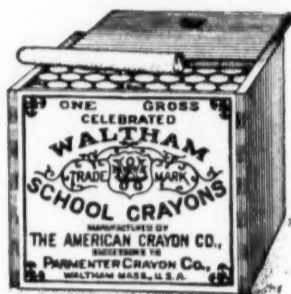
"This details plenty shows th material assigned forever n Somebody principal in print the good brings to ignorant, lic ought."

"A 'kn Show the got it, ge be any school is."

"Paper and Tablets Have Doubled in Price." "Pencils Have Advanced."

You can help cut down the high cost of writing materials for the children by arranging for more individual work at the black-board. Crayons are inexpensive.

Use the best, buy the celebrated Waltham brand or the Hygieia Dustless.



THE AMERICAN CRAYON COMPANY
Sandusky, Ohio Established 1835 Waltham, Mass.

"The children are not thoroly grounded in anything. Reading, writing and arithmetic are woefully neglected. It is impossible to get competent boys and girls."

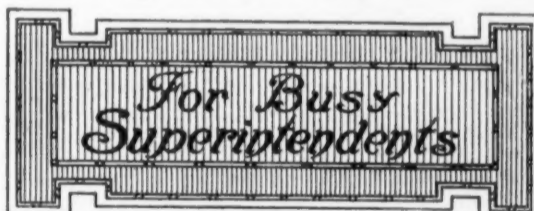
"The publication of such animad-versions, we must conclude, furnishes a remarkably fine opportunity for the schoolmasters to get the excellent work of their schools into public notice. Every attack excites an interest, which a mere statement of fact cannot emphasize. If a school is turning out a well equipped product, no city editor can find any precedent for putting that fact on the front page; but if Michael Friedsam delivers an address, in which he says that the graduates of the public schools cannot write, cannot spell, cannot perform the fundamental operations of arithmetic, this immediately gives a news value to any good work in any school, if the principal will only go to the telephone and call up the city editor, and say:

"This is Public School No. 198. You printed a statement last night by Michael Friedsam that the graduates of our public schools can neither write, spell nor cipher. Will you print a challenge to Mr. Friedsam to set a date when he will come and examine the graduating class of No. 198, and will you come with him? If he doesn't come, will you send your own representative to test them?"

"This would get on the front page, and the details of the test, when given, would be given plenty of good space. Experience repeatedly shows that the newspaper man longs for positive material to offset the negative knocks which are assigned to him to make a story of. He can't forever make up the good things out of his head. Somebody has to lead him to it. This is the principal's business. The appearance of criticism in print furnishes the opportunity. Producing the goods not only confutes the charges, but it brings to the attention of the public, otherwise ignorant, evidence of excellence of which the public ought to know.

"A 'knock means open the schoolhouse door. Show the public what you've got. If you haven't got it, get it. There's no reason why there should be any doubt about what kind of product the school is delivering. There's no valid reason why

it should be a poor product. The overworked teacher cry furnishes no reason. The insurance men show us we live longer than anybody. It isn't the amount of work that kills. The schools that are delivering the high per cent abilities in English, concentration, independence of thought and action and arithmetic are not tired. The success of achievement furnishes them refreshment. Let us hope that knocking at the schools continues and grows louder until the principals of the schools that are making good will issue such challenges as I have mentioned."



A survey of the public-school system of St. Paul, Minn., has been begun by Prof. G. D. Strayer of Columbia University, Dean L. D. Coffman of the College of Education, University of Minnesota, and Dr. C. A. Prosser of Dunwoody Institute. The survey is to form the basis of the educational plan for the next five years.

A partial reorganization of the Chicago school system has been recommended by Supt. John D. Shoop in a recent report submitted to the Committee on Educational Survey. Supt. Shoop suggests a division of activities into four departments as follows: Department of Assignments; Department of Repairs and Supplies; Department of Evening and Vocational Schools.

All of these departments with the exception of repairs and supplies, are now in existence. It is Mr. Shoop's opinion that an assistant superintendent of schools should be placed in charge of each.

Other recommendations contained in the report are: Technical high school for girls located on the northwest side; school of commerce and industry to prepare pupils for entrance into the commercial field; extension of the course in English for foreign-born residents

to the evening schools, community centers and where practicable, to the day schools; employment of persons of high educational standing to lecture on educational topics to the teaching force of the schools.

A Southeastern Idaho Co-operative Testing Association has been organized with 29 schools participating. The standard tests are being given uniformly in all these schools and the results tabulated for comparison. The work was started at the Institute at Pocatello by a series of demonstrations given at that time. The Association was formed at the end of the Institute with Supt. W. D. Vincent of Blackfoot as the chairman. All tests are sent out from the one office and reports received and results listed. The discussion of the results and plans for improvements are to be taken up at The School Masters' Club which covers this same territory.

The results of this association have been so gratifying that the State Teachers' Association which recently met at Boise will undertake to make the plans put into operation by Supt. Vincent extend over the whole state and thus give a survey of the entire school system. The principals and superintendents are entering into the scheme with increasing enthusiasm as it gives new life to every branch of school activity and at the same time points out the strong and weak points of each city school system.

Belleville, Ill. The school board has ordered that the grade schools be reorganized on the six-and-six plan. About five hundred pupils of the seventh and eighth grades will be accommodated in the central building.

Supt. C. H. Bruce has recommended to the board at Macon, Ga., that class promotions be made semi-annually in February and June, of each year.

Brooklyn, N. Y. Public School No. 149 has been designated for a trial of the work-study-play plan. An auditorium has been provided and a number of rooms have been opened for the teaching of special subjects.

The Lima, Ohio, schools will open in 1918 with a six-and-six form of organization. The plan contemplates the opening of two junior high schools,

\$873.00 Saved by Installing the "American Solar Fan System" in this Building



LOWELL SCHOOL, COFFEYVILLE, KANS.

30 cubic feet of Fresh Air per pupil, per minute, Simplicity of Operation, Low Fuel Cost.



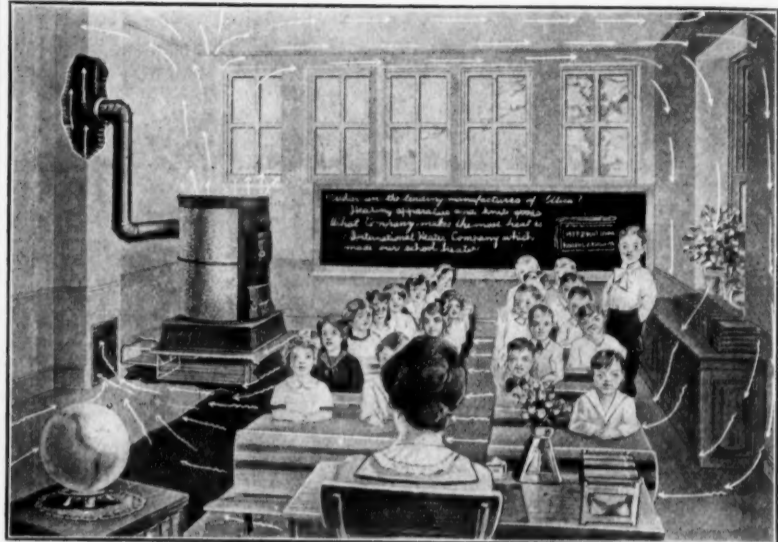
TRADE MARK

**AMERICAN FOUNDRY
& FURNACE CO.**

Bloomington, Ill.

Send us your plans and we will prepare estimates on your building.

The INTERNATIONAL System



A WELL WARMED, WELL VENTILATED SCHOOLROOM USING

THE INTERNATIONAL SCHOOL HEATER

Properly designed and carefully built for warming and ventilating One-room School Buildings. Furnishes the proper amount of fresh warmed air to each pupil.

Send for Catalog No. 4010

INTERNATIONAL HEATER CO.

UTICA, N. Y.

NEW YORK
601 W. 27th St.

CHICAGO
1933-35 Wentworth Ave.



in one of which will be included a technical school.

Milwaukee, Wis. The board has ordered that first-grade children be accommodated upon the kindergarten schedule wherever space may make it desirable. Such groups will be called half-day classes of which there are now nineteen.

Andover, Mass. Departmental teaching has been introduced in the seventh and eighth grades. Manual training and household arts are offered.

Supt. J. A. Whiteford of Oklahoma City, in connection with a proposed bond issue for better school accommodations, has submitted to the board a complete survey of the school housing conditions as they exist at present. He reports that 25 frame rooms are being used to care for large numbers of children and that in many cases, double sessions are being held in rooms. The rooms are poorly heated, the lighting is harmful to the pupils and inadequate for school work, the ventilation is poor, and basement rooms are in frequent use. Supt. Whiteford recommends that junior high schools be opened to care for the pupils of the upper grades.

Because enrollment in the public schools of Cleveland, Ohio, in the four years ending Sept. 1, 1916, increased 22,529, the schools were forced to absorb that abnormal growth in ways which effected savings of nearly \$4,000,000.

This fact has been made the salient feature of the annual report of Supt. J. M. H. Frederick which has been submitted to the board. In 1911-12 when Supt. Frederick took charge, the number of pupils to a teacher was 38, and in 1915-16 it was 42.9. In 1915-16 the elementary teachers cared for 9,209 more pupils than they would if the average number for a teacher had been the same as in 1911-12.

Treating the matter in another light, Supt. Frederick says that 242 fewer teachers were employed the past year than would have been needed had the per capita of pupils to teachers in 1911-12 been maintained.

The result has been a saving for elementary pupils of 242 rooms, or more than ten elementary buildings of 24 rooms each. In high schools there has been little provision made for the accommodation of the increase.

On the basis of 1911-12 the enrollment last year would have required eight more teachers in academic high schools, fifteen in technical and eight in the High School of Commerce, or a total of 31 more teachers and a corresponding number of rooms. By absorbing 242.5 elementary and the 31 high school classes, there has been avoided an outlay of \$3,000,000 for new buildings and salaries of instructors.

The saving in salaries alone is approximately \$200,000. Justification of the policy of increasing the average number of pupils to a teacher, rests chiefly in its ability to meet the conditions caused by the shortage of funds and the unparalleled growth of the schools. Even had the necessary financial means been at hand the consequent embarrassment could not have been avoided due to insufficient bond issues and the inability of the tax duplicate to keep pace with the growth of the school system.

An important part of the report is the mention of additional room gained thru a continuation of the superintendent's policy regarding retardation. Thru the advancement of 2,525 pupils whose work had improved, at other than the usual promotion time, there were opened to the schools about sixty semester rooms, or an equivalent of a 30-room building for a year.

Additional consolidations have been arranged in the kindergarten, which have resulted in economy and efficiency. It has been possible to save 33 kindergarten teachers and to keep the number of pupils to a teacher in harmony with the general practice in cities of the size of Cleveland. The number of pupils, however, which is necessary to assign an assistant, is somewhat larger than is desirable. It is predicted that the number of teachers saved in this department will not be a net gain since the enrollment will be materially greater in the future.

Baltimore, Md. The board has ordered that special classes be opened for deaf and dumb children. Two special teachers have been appointed for the work.

Supt. F. E. Lurton of East Grand Forks, Minn., has been appointed to assist Co. Supt. N. A. Thorson and Rural School Director Annie E.

Shelland in a survey of the rural schools of Polk County.

An organization of administrative officers, including superintendents, principals and deans of high schools has been formed at Omaha, Neb., for the promotion of efficiency and co-operation. Supt. E. U. Graff has been elected president. The organization expects to become a clearing house for ideas on school improvement. It will meet from time to time to discuss problems and to listen to addresses on educational topics.

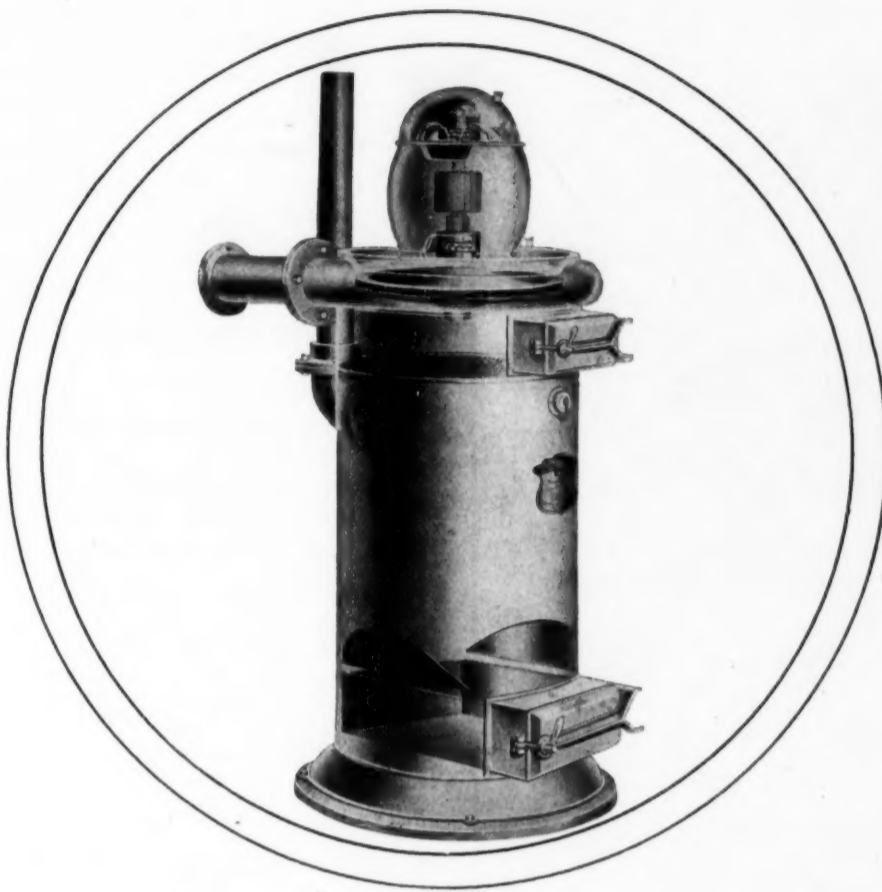
Supt. B. E. McCormick of La Crosse, Wis., has been appointed one of a committee of one hundred educators which is to make a personal study of the country school system of Wisconsin. The investigation which is under the direction of Mr. Theodore Kronshage, seeks to remedy defects in the country schools and to bring them up to the standard.

Rock Island, Ill. A reorganization of the two departmental schools has been effected. Mr. W. C. Robb has been appointed as principal of both buildings.

The final recommendations of the Indiana Vocational Survey Committee for the reorganization of the Evansville school system have been made to the Indiana State Board of Education by Prof. Charles H. Winslow, Director of the Survey.

The recommendations deal with the tendency of pupils to leave school at 14 years of age without any wage earning capacity; with the proposed plan to increase the age of compulsory attendance from 14 to 16 years; with the disposition of unemployed children who have left school to return in case they have an opportunity to acquire training for one of the vocations; with the present lack of trained workers for Evansville industries, and with the failure of the modern shop to train its workers.

A sweeping survey of the schools of Virginia is proposed by the Virginia State Teachers' Association following a meeting of the executive committee at the annual meeting of the association. The resolutions have been referred to the State Educational Conference for further action.



ENTHUSIASM---A RARE DISEASE

Children who lack enthusiasm in their studies are like men who lack enthusiasm in their work.

Enthusiasm is one of the rarest, yet the most desirable disease to be found both in children at school, as well as with men in connection with business.

But, you cannot expect enthusiasm to exist amongst teachers and children where dust and dirt are allowed to circulate. The less energy and vitality a person may have the less likely they are to become afflicted with this disease.

You can easily keep your school room clean and assist the disease of enthusiasm by installing a

TUEC STATIONARY CLEANER

Hundreds of schools are now being cleaned with the TUEC. In many cases it has even happened that another machine was installed and after a few months was found to be impractical and the TUEC took its place.

It is impossible to prevent the children from bringing the dirt on their shoes into the school room.

But, it is possible for your Janitor to remove the dirt from the floor effectively every night if you have a TUEC in your school.

For further information write the

UNITED ELECTRIC COMPANY

7 HURFORD STREET

CANTON, OHIO

JUST AS IMPORTANT to ventilate school rooms as to heat them

Parents and school officials are realizing that it is just as necessary to ventilate school rooms as to heat them—it is plainly evident that foul and vitiated air should not be reheated and breathed again and again, but should be passed out of the room through a ventilator.

THE FRONT RANK SCHOOL HEATER AND VENTILATOR

has been designed especially to meet the requirements of up-to-date schools. It is a simple apparatus, easily controlled, and changes the air several times an hour. The inside air is shut off by turning the damper in the cold air duct; and the **entire supply comes directly from outdoors**. The smoke pipe passes through the center of vent pipe, making it a never-failing, positive ventilator.

Write us for further particulars

Haynes - Langenberg Mfg. Co.
St. Louis, Missouri

Front Rank
School Heater
and Ventilator



VINCENNES PUBLIC SCHOOLS JUNIOR AND SENIOR HIGH SCHOOL RECORD										INDIANA	
Pupil		Parent		Address							
(E) EXCELLENT; (G) GOOD; (F) FAIR; (P) POOR; (N) C; NO CREDIT; (A) Absent; (S) Sick; (T) Transfer; (D) Death; (R) Resigned; (M) Moved; (O) Other.											
YEAR	SUBJECTS	1	2	3	4	5	6	7	8	9	10
	English										
	Mathematics										
	Science										
	History										
	Physical Education										
	Art										
	Music										
	Foreign Languages										
	Industrial Arts										
	Home Economics										
	Health										
	Character Education										
Date of Graduation _____ Principal _____											

VINCENNES PUBLIC SCHOOLS PERMANENT ELEMENTARY SCHOOL RECORD										INDIANA	
Pupil		Parent		Address							
(E) EXCELLENT; (G) GOOD; (F) FAIR; (P) POOR; (N) C; NO CREDIT; (A) Absent; (S) Sick; (T) Transfer; (D) Death; (R) Resigned; (M) Moved; (O) Other.											
YEAR	SUBJECTS	1	2	3	4	5	6	7	8	9	10
	English										
	Mathematics										
	Science										
	History										
	Physical Education										
	Art										
	Music										
	Foreign Languages										
	Industrial Arts										
	Home Economics										
	Health										
	Character Education										
TRANSFERRED FROM _____ TO _____ DATE _____ FROM _____ TO _____ DATE _____ FROM _____ TO _____ DATE _____											

PERMANENT ATTENDANCE RECORD JUNIOR AND SENIOR HIGH SCHOOL												INDIANA	
Pupil		Parent		Address									
(E) EXCELLENT; (G) GOOD; (F) FAIR; (P) POOR; (N) C; NO CREDIT; (A) Absent; (S) Sick; (T) Transfer; (D) Death; (R) Resigned; (M) Moved; (O) Other.													
YEAR	SUBJECTS	1	2	3	4	5	6	7	8	9	10		
	English												
	Mathematics												
	Science												
	History												
	Physical Education												
	Art												
	Music												
	Foreign Languages												
	Industrial Arts												
	Home Economics												
	Health												
	Character Education												
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PERMANENT ATTENDANCE RECORD ELEMENTARY SCHOOL												INDIANA	
Pupil		Parent		Address									
(E) EXCELLENT; (G) GOOD; (F) FAIR; (P) POOR; (N) C; NO CREDIT; (A) Absent; (S) Sick; (T) Transfer; (D) Death; (R) Resigned; (M) Moved; (O) Other.													
YEAR	SUBJECTS	1	2	3	4	5	6	7	8	9	10		
	English												
	Mathematics												
	Science												
	History												
	Physical Education												
	Art												
	Music												
	Foreign Languages												
	Industrial Arts												
	Home Economics												
	Health												
	Character Education												
TRANSFERRED FROM _____ TO _____ DATE _____ FROM _____ TO _____ DATE _____ FROM _____ TO _____ DATE _____													

FIG. 1. PERMANENT RECORD CARDS.

The two lower cards are the front and back of the elementary permanent record. The originals measure nine by six inches and provide for six years' records. A white card is used for the girls; a green for the boys. The upper cards are used in the junior and senior high schools.



DIRT--DUST--SOILED CLOTHES-- EVEN BREATHING THIS UNHEALTHY DUST

must be *stopped* if you want the children to have good, healthy and strong lungs. It is alright for those who are excused from the work of cleaning erasers, but it is mighty dangerous for those who have this task to perform.

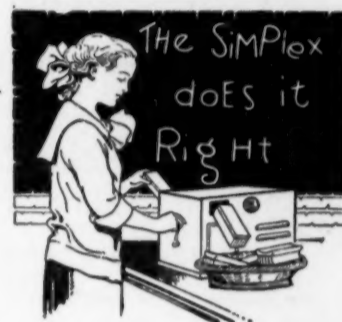
SIMPLEX ERASER-CLEANER

cleans 50 erasers perfectly in ten minutes and also combines all the features so essential to the Hygienic Conditions of the Schoolroom.

HERE'S THE SOLUTION -

Easy to operate, occupies only small space, requires no motor or expensive installation, is substantially built of steel and can be operated by even the smallest child.

Write today for circular and full particulars.
Special proposition to all School Supply Houses.
Agents wanted for unoccupied territory.

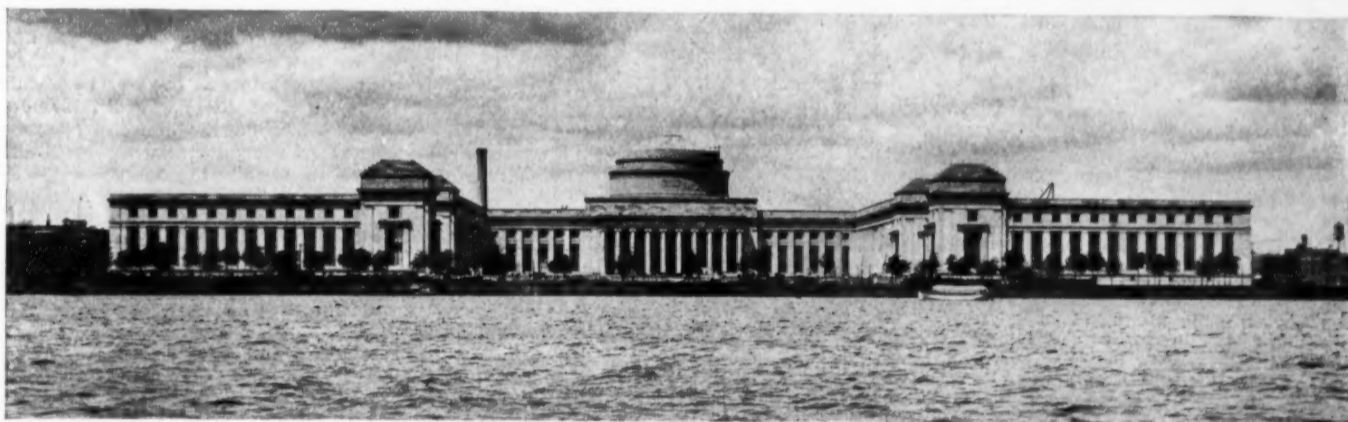


MANUFACTURED BY

JAMES LYNN

Home Office: Wabash, Indiana

Chicago Office: 14 E. Jackson Blvd.



"Tech" Equipped with the SPENCER



3 H. P.

The selection of Spencer Turbine Vacuum Cleaners for the magnificent new group of the Massachusetts Institute of Technology in Cambridge, Mass., should be of special significance to all school boards. This selection was not made at random, but is the result of the policy governing the selection of everything entering into the construction and equipment of this wonderful group. This policy is voiced by the statement:

"The Institute is striving to equip its great group of buildings so as to be a model of the best in the field of applied science."

Spencer Vacuum Cleaning Systems are being selected by many of the big school buildings now being constructed. And much of this business has come to us only after exhaustive competitive tests.

Our Engineering Department is at all time ready to prepare specifications, piping layouts and recommendations as to the most suitable size equipment for any school structure, old as well as those contemplated or now in the course of construction. This service is entirely gratis and incurs no obligation on your part.

THE SPENCER TURBINE CLEANER CO.

620 CAPITOL AVENUE

HARTFORD, CONN.

"From The Milwaukee Sentinel, Friday, Dec. 15, 1916.

1000 CHILDREN DRIVEN FROM SCHOOL BY FIRE IN BASEMENT OF DOVER STREET SCHOOL

Waste Paper Caused Blaze"

Be sure this does not happen in your school. Remove this hazard by storing your waste in the

FIRE-
PROOF

ALSTEEL

PAPER
BALER

At the same time convert your waste into a source of profit. Baled paper is worth \$15.00 a ton and up. Loose paper is worthless and a constant fire menace.

WHY TAKE CHANCES AND LOSE PROFITS

when you can buy a GUARANTEED STEEL BALER for \$25.00, \$35.00 or \$75.00 according to size.

Write for catalog and our

SPECIAL PROPOSITION TO SCHOOLS

Detroit, Mich., 12/2/16.

Alsteel Mfg. Co.,

Gentlemen:—At a meeting of the Board of Education your proposition was accepted to furnish this Board with Alsteel Waste Paper Balers, No. 2, 16x20 in. Enclosed please find order.

Yours respectfully

Chas. A. Gadd, Sec'y.



ALSTEEL MANUFACTURING CO.

BATTLE CREEK, MICH. U.S.A.

BATTLE
CREEK,
MICHIGAN

Every School Auditorium



must have a certain amount
of Scenery

We make SCHOOL Scenery our specialty

Write for our Catalog on School Scenery

Sosman & Landis Co.

Established 38 Years

417 S. Clinton Street

CHICAGO



OPEN WINDOW SCHOOLROOMS.

By W. W. Roach, M. D.

It is a logical process of reasoning easily understood, that since fresh air has been found a boon to invalids and sickly children, it is even more important to supply an abundance to healthy children in order that they may retain their good health and develop as nature intends children should.

As parents realize this truth more and more, there is a growing demand for the teaching of their children in open window classrooms. In our day the gospel of fresh air and sunshine should need little preaching; most of us accept it. But we do not always practice the doctrine we believe in and teach. Too many of our schools are over-heated and poorly ventilated; too many of our homes and offices are human drying ovens.

It was found at the Bache school in Philadelphia where careful tests have been made, that pupils taught all thru the winter in rooms with the windows wide open, did better work, enjoyed better health and as a consequence were more regular in attendance than their fellows taught in the warm air rooms.

Almost anyone on reflection will be impressed with the futility of expecting a maximum progression physical and mental, when children are housed in over-heated rooms, with little or no moisture, compelled to sit in uncomfortable positions and perform tasks prodigious and complicated to feeble and inactive minds resulting from undernourished and devitalized bodies. Such children, passing on dismissal into the cool moist atmosphere outside the building have their respiratory mucous membranes suddenly chilled, and catch cold. Not so with children from open window rooms, breathing a mixture of air and moisture exactly like that and of the tempera-

ture of the outside atmosphere. They keep well, are more active and alert.

The effect of cool, fresh air is to create a desire for active exercise, a natural physiological demand for increased circulation of the blood. To meet this need short physical exercises at frequent intervals between lesson periods are necessary. Such are shown by a motion picture film of Bache school children that will be loaned to careful committees seriously engaged in securing fresh air advantages for other children anywhere. —Good Health.

SCHOOLROOM HYGIENE.

Marion, O. Examinations of pupils in grade schools were recently made by a nurse working under the auspices of the women's clubs. More than two hundred pupils have been examined, revealing defects of eyes, ears, nose and throats.

East Providence, R. I. The system of medical inspection has been reorganized, with two physicians in charge of the work. One inspector will have a part of the grade schools and one class in the high school. The other will have the remaining three classes of the high school and six other buildings.

St. Paul, Minn. Classes for exceptional children have been started at the Tilden School. The new center is the third to be opened, making it possible for the board to take care of about 250 children.

Columbus, O. A state hospital and school for crippled and deformed children is planned. The school will be near the city of Columbus and will take care of children of indigent parents. Accommodations will be limited to 25 or 50 children and all treatment will be gratis.

The State Board of Health of Indiana is seeking the passage of a bill at the next legislature which is intended to make school inspection com-

pulsory in every township. A department of school hygiene is to be established under the supervision of the state department of education. The law is intended to benefit the 90 to 95 per cent of children who are physically defective.

New York, N. Y. From 15,000 to 20,000 of the city's 800,000 school children are suffering from heart disease, according to a survey conducted by the Association for the Prevention and Relief of Heart Disease. The Post-Graduate Hospital has offered the services of a committee of physicians and social workers to aid sufferers.

Health tests conducted by rural teachers in Franklin County, O., show that 616 children have defects of sight, hearing, speech, nose or throat. It is estimated that 275 children are retarded in school work, that 3,425 are over-age, and 617 are ahead of their classes.

The Illinois State Department of Education has begun a survey of school building conditions to bring to school directors a knowledge of what the public health requires from them and to secure the enforcement of the sanitation law. Past experience has shown that the lax conditions in many schoolhouses have often been the cause of the spread of contagious diseases.

The Department of Health has just issued in this connection, a series of bulletins intended for the use of school children.

In Marshalltown, Ia., the school nurse has been found not only an effective means of discovering physical defects but also an excellent preventative against the spread of contagious diseases. For a period of six weeks ending December, 1916, the nurse reported 55 ward calls, 2,158 pupils examined, 85 homes visited and 337 pupils sent to physicians for examination.

In the number of defects, more children suffer from defective teeth than from any other cause. Nose and throat troubles are second and poor eyesight third. Comparatively few cases of deafness have been found which materially interfere with progress in classes.

In the opinion of the school authorities, the nurse is the most important means for insuring prompt medical treatment for the children. The problem of proper nutrition has frequently been very satisfactorily solved by the nurse's work.

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IMPROVED SECTIONFOLD PARTITIONS

(Patents applied for)

are the most reliable Folding Partitions for Public and Private Schools
No Hangers---No Half Doors

Improved Sectionfold Partitions are now being specified for:

New York Public Schools	C. B. J. Snyder, Architect
Newark Public Schools	E. F. Guilbert, Architect
Trenton Public Schools	W. A. Poland, Architect
Philadelphia Public Schools	Horace A. Cook, Architect
Providence Public Schools	Commissioner of Public Buildings
Cleveland Public Schools	W. R. McCornack, Architect

Many other cities and towns have now recognized these Partitions to be the only ones that meet all requirements. Can be furnished with slate panels and folding chalk troughs, if desired.

One of the special features of Sectionfold Partitions is the flush track in the floor. These partitions are also used largely in Y. M. C. A. Buildings, Institutes, Clubs, Churches, etc.

"Simple of construction; easy of operation"

See Sweets

Sole Owners and Manufacturers

Send for Catalog

FOLDING PARTITION COMPANY, 200 BROADWAY, NEW YORK, N. Y.

The response of parents to the advice of the nurse has been quite satisfactory and more efficient work on the part of the pupils has resulted thru the removal of defects.

La Moure County, N. Dak., for the third year has employed a trained school nurse who spends her entire time the year round in the health work of both rural and village schools. The county has affiliated with the national Red Cross Town and Country Nursing Association. Miss Mary Alberta Baker of Baltimore is the nurse. She has done and is doing a wonderful work. Her work has attracted the attention of the entire state and other counties are planning to hire a nurse. North Dakota has done a great deal along the line of health work in the rural school.

Elgin, Ill. An athletic field for students of the public schools is planned by the board. The proposed field will be about the size of a city block, and will include a quarter mile running track, a football gridiron, baseball diamond, and a playground with complete equipment and provisions for athletic games.

A recent report of Director Nathaniel J. Young of the Boston Hygiene Department shows that 23,668 students in high and elementary schools were engaged in athletics during the past year.

Brookline, Mass. The social center work at the Heath and Sewell Schools has been enlarged in scope to include clubs for young women and mothers in dressmaking and millinery, sewing and basketry. A social dancing club has been formed for married women.

Springfield, Ill. The board has authorized the purchase of a piece of ground for athletic purposes. A stadium will be erected to include baseball, track and football diamonds and seating accommodations for athletic meets.

Allentown, Pa. A compulsory course in physical culture has been added.

Lynn, Mass. A course in physical culture has been introduced in the Washington School.

Cleveland, O. Attendance at Public School gymnasium classes increased 42 per cent this year, according to Dr. E. A. Peterson, school medical director. The attendance was 137,841 or 41,206 greater than last year. The gymnasiums were in use 2,114 times.

COMMUNICABLE DISEASES AMONG CHILDREN

Rules for Isolation and Exclusion from School

DISEASE	PRINCIPAL SIGNS AND SYMPTOMS	METHOD OF INFECTION	EXCLUSION FROM SCHOOL					DURATION OF EXCLUSION PERIOD		
			PATIENT	Other child, same household	Other child, same school	Other child, same neighborhood	Other child, same city	PATIENT	Others who come in contact with patient	Others who come in contact with patient
CHICKENPOX	Sometimes begins with feverishness but is usually very mild and without signs of fever. Rash appears on second day as small pimples, which in about a day become filled with clear fluid. This fluid then becomes matter, and later the spot dries up and the crust falls off. May have successive crops of rash until tenth day.	Mouth spray and crust of spots	Yes	Yes	No	Yes	No	18 days, until scales are fallen off and disinfected	10 days and disinfection	3 days and until disinfected
DIPHTHERIA	Onset insidious, may be rapid or gradual. Typically sore throat, great weakness, and swelling of lymph nodes in neck, about the angle of the jaw. The back of the throat, tonsils or palate may show patches like pieces of grayish-white kid. The most pronounced symptoms are great debility and lassitude, and there may be little else noticeable. There may be hardly any symptoms at all. Cases of group are frequently in reality laryngeal diphtheria.	Mouth spray and discharges from nose, mouth, and ears. Milk may carry infection	Yes	Yes	Yes	Yes	Yes	After disinfection, until recovery, at least 2 weeks 2 successive cultures from throat showing no bacilli	After disinfection, until recovery of patient at least 25 days from beginning of last case, 3 cultures and disinfection	After disinfection of clothing. One week, culture
MEASLES	Begins like cold in the head, with feverishness, running nose, inflamed and watery eyes, and sneezing; small crescentic groups of mulberry-tinted spots appear about the Third day; rash first seen on forehead and face. The rash varies with heat; may almost disappear if the air is cold, and come out again with warmth.	Mouth spray and discharges from nose and mouth	Yes	Yes	No	Yes	No	At least 2 weeks, recovery and disinfection	If excluded, until recovery of patient. At least 10 days.	Three Days
MEASLES (GERMAN)	Illness usually slight. Onset sudden. Lymph nodes back of ears enlarged. Rash often first thing noticed; no cold in head. Usually feverishness and sore throat and the eyes may be inflamed. Rash something between measles and scarlet fever; variable.	Mouth spray and discharges from nose and mouth	Yes	Yes	No	Yes	No	Ten days recovery and disinfection	Ten days	Three Days
MUMPS	Onset may be sudden, beginning with sickness and fever, and pain about the angle of the jaw. The glands become swollen and tender and the jaws stiff, and the saliva sticky.	Mouth spray and discharges from nose and mouth	Yes	Yes	No	Yes	No	14 days, recovery and disinfection	14 days	At once
SCARLET FEVER SCARLETTINA SCARLET RASH	The Onset is usually sudden, with headache, languor, feverishness, sore throat, and often vomiting. Usually within twenty-four hours the rash appears, finely spotted, evenly diffused, and bright red. The rash is seen first on the neck and upper part of the chest, and lasts three to ten days, when it fades and the skin peels in scales, flakes, or even larger pieces. The tongue becomes whitish with bright red spots. The eyes are not watery or congested.	Mouth spray, discharges from nose and mouth, and a p p u rating glands or ears. Milk specially apt to convey infection.	Yes	Yes	Yes	Yes	Yes	At least 6 weeks, after disinfection, until recovery	After disinfection, until recovery of patient at least 10 days	10 days after disinfection of clothing.
SHALLPOX	The illness is usually well marked and the onset rather sudden, with feverishness, severe backache and sickness. About the third day a red rash of shotlike pimples, felt below the skin, and seen first about the face and wrists; spots develop in two days, then form little blisters, and after two days more become yellowish and full of matter. Scabs then form, which fall off about the fourth day.	Mouth spray, all discharges and particles of skin or scabs.	Yes	Yes	Yes	Yes	No	Recovery and disinfection of person. Relieved from quarantine.	22 days after child last saw patient or 7 days after successful vaccination or 10 days after successful vaccination and disinfection of person. Relieved from quarantine.	10 days or 7 days after successful vaccination or 10 days after successful vaccination and disinfection of person. Relieved from quarantine.
SORE THROAT ACUTE SCARLETTINA TONSILLITIS	Begins with sore throat and weakness. Throat diffusely reddened and may show patches like diphtheria.	Mouth spray and discharges from nose and mouth. Milk often conveys infection.	Yes	No	No	No	No	Recovery		
WHOOPING COUGH	Begins like cold in the head, with bronchitis and sore throat, and a cough which is worse at night. Symptoms may at first be very mild. Characteristic "whooping" cough develops in about a fortnight, and the spasms of coughing often ends in vomiting.	Mouth spray and discharges from nose and mouth.	Yes	Yes	No	Yes	No	Until recovery, 1 week after last characteristic cough, disinfection of person		

*Sec. 2571-1a, Sup. Code of Iowa, 1915. 2 Immunes are those who have had the disease. It is assumed that the patient is strictly isolated. The physician attending cases of whooping cough, measles, mumps or chicken pox shall be required to report the same to the local board of health. In case there is no attending physician, it shall be the duty of the parent or guardian or school teacher to report the same to the local board of health.

Disinfection: The cleansing and disinfection of the person includes washing the entire body and the hair with soap and water; thorough brushing of the teeth; rinsing the mouth; gargling the throat; and douching and spraying the nose with an antiseptic solution, and, finally, a complete change of clothing (or a change of underwear and a thorough shaking and brushing of the outer garments out-of-doors before these are put on again.) Patient, and all quarantined in all above diseases, are excluded from the public schools, in addition to above, until he obtains and presents a certificate from the health officer.

Approved by the School Board, Health Officer, and Mayo, for the City of Clarion, Wright County, Iowa
W. H. TROWBRIDGE, President Board of Directors. E. D. TOMPKINS, Health Officer.

This day of 1916.
Arranged by Geo. H. Kellogg, Superintendent

Wall Chart arranged by Supt. Geo. H. Kellogg and placed in all classrooms of Clarion, Ia., Schools.

THE "STANDARD STEEL" SCHOOL DESK



Patented

SUPREME IN STRENGTH

One-piece steel standards doubled and pressed forming four right angle walls, a construction undeniably the most rigid of all shapes

SUPREMELY SANITARY

Plain in design with no dust crevices.* Book-shelf, unusually ample, pierced at ends to free dust. All woodwork finished with shellac only, not a high lustre.

Solid cherry woodwork, the best of all woods. Metal parts entirely of steel, japanned an olive green shade—soft to the eye. Metal pen groove saves ink from the wood and makes the top more easy to refinish. Noiseless close-folding seat.

This desk has made many friends during the three years it has been gradually put on the market.*

A sturdy desk of light weight with special packing is accessible to customers at long distance at a low cost of freight in excellent order direct from the oldest school desk factory in this country.

NEW JERSEY SCHOOL-CHURCH FURNITURE CO.

Trenton, New Jersey

* Counting the numerous diseases carried by dust should not all desks be plain and smooth?



Silent Giant Adjustable Desk

In buying an Adjustable Desk you will be influenced by the following general features:

Quality, Comfort, Durability,
Adjustability, Individuality,
Simplicity of Construction,
Appearance, Sanitation, and
last but not least—COST

All of these are incorporated in the Silent Giant Adjustable Desk.

Write for complete Catalog and Prices

PETER & VOLZ CO.

Manufacturers

Office and Factory: Arlington Heights, Ill.

DEPARTMENT OF SUPERINTENDENCE.

(Concluded from Page 20)

(a) *As Related to the Mental Growth of Children*—Supt. James H. Van Sickle, Springfield, Mass., and Asst. Supt. Adelaide Baylor, Indianapolis, Ind.

(b) *As Related to the Child's Social and Economic Efficiency*—District Supt. Grace C. Strachan, New York City, and Supt. J. H. Bentley, Paducah, Ky.

Health Problems of Rural and Village Schools—State Supt. H. A. Davee, Helena, Mont.

The High School Teacher's Professional Preparation—Prin. W. D. Lewis, William Penn High School, Philadelphia, Pa.

Report of Committee on Military Training in the Public Schools, Supt. Franklin B. Dyer, Boston, Mass.

Friday, March 2, 2:00 p. m.

Educational Innovations and Experimental Movements.

(a) *Some Remarkable Educational Achievements in the Rural Schools*—Albert E. Winship, Editor Journal of Education, Boston, Mass.

(b) *Extending the Child's Educational Opportunities*—Asst. Supt. J. Wilmer Kennedy, Newark, N. J.

(c) *A New Organization of School Activities*—Supt. L. R. Alderman, Portland, Ore.

A Kindergarten Training for Every Child—Miss Bessie Locke, Chief of the Kindergarten Division, United States Bureau of Education, Washington, D. C.

Report of Committee on Efficiency and Economy of Time in Education, Supt. H. B. Willson, Topeka, Kans., Chairman.

N. E. A. TO PORTLAND.

The executive committee of the National Education Association decided on December 19th by unanimous vote to hold the next annual convention of the organization at Portland, Ore., provided the transcontinental passenger association consents to make a satisfactory rate. At the present time there seems to be no possibility of the failure of the association to grant a very favorable reduction west of Chicago and St. Paul. The convention at Portland will be the first held north of San Francisco and west of St. Paul. It

is likely that the meeting will open July 7 and close July 14.

NEW UTAH CODE.

The entire reorganization of the Utah school system, from the university to the country school, has been recommended in a recent report of the educational code commission. The commission is preparing bills which it will present to the legislature, covering the changes recommended.

The changes embodied in the commission's report provide for a state board of education to replace the present board, and to have the duties and powers of the board of regents of the University and those of the trustees of the Agricultural College, the State Industrial School and the Deaf and Blind School.

The report recommends that the state board be composed of six members appointed by the governor for a term of six years, two to be named each biennium. The board is to have the following powers:

1. To appoint a commissioner of education who will then become a member of the board.

2. To control all state educational and custodial institutions, appointing the executives of them, and, at the suggestion of the executive, naming all the heads of departments and teachers.

3. To name all subordinates of the commissioner of public instruction.

4. To prepare a school budget for each session of the legislature.

5. To perform all the duties of the superintendent of public instruction, state board of education, board of regents of the university, boards of trustees of the Agricultural college, the state school for the deaf and the blind and the state industrial school.

6. To regulate the distribution of school funds.

7. To enforce all school laws.

8. To provide for the training and examination of teachers.

9. To provide for vocational training.

10. To provide for the erection of buildings and their care, and, in connection with the state board of health, to oversee sanitary conditions in the schools and medical inspection of all pupils.

11. To provide for ample publicity regarding the school system.

12. To determine the preliminary education of candidates for admission to practice any profession regulated by the state board.

Several constitutional amendments will have to be made to effect the changes recommended by the commission. Among other things urged in the report is a change in the method of levying school taxes and also of distributing school funds. Measures to promote the welfare, particularly of the country school are also contemplated in the proposed bills.

COMING CONVENTIONS.

Feb. 6-7—Pennsylvania State Association of School Board Secretaries at Harrisburg. A. W. Moss, Secy., Wilkes-Barre.

Feb. 8-9—Pennsylvania State School Directors' Association at Harrisburg. D. D. Hammelbaugh, Secy., Harrisburg. Probable attendance, 300.

Feb. 26-Mar. 3—Department of Superintendence, N. E. A., at Kansas City, Mo. Miss Margaret McGuire, Secy., Philadelphia.

Feb. 28-Mar. 2—National Association of State Inspectors and Superintendents of Rural and Consolidated Schools at Kansas City, Mo. L. J. Haniffan, Secy., Charleston, W. Va.

Mar. 8-10—Golden Belt Educational Association at Hays. J. H. Niesley, Mem. Executive Committee, Wakeeney, Kans. There will be a commercial and educational exhibit.

Mar. 15-17—Central Minnesota Educational Association at St. Cloud. I. T. Johnsrud, Secy., St. Cloud. Probable attendance, 500. There will be a commercial and educational exhibit.

Mar. 22-24—Northcentral Association of Colleges and Secondary Schools at St. Louis. Henry E. Brown, Secy., Kenilworth, Ill.

Mar. 22-24—Northwest Iowa Teachers' Association at Sioux City. M. G. Clark, Secy., Sioux City. Probable attendance, 1,000.

Mar. 29-31—Northern South Dakota Educational Association at Mobridge. S. D. Harriet Carpenter, Secy., Aberdeen. Probable attendance, 400.

Apr. 12-14—Arkansas State Teachers' Association at Little Rock. W. E. Laseter, Secy., England, Ark.

SEE SUPERIOR LINE OF SANITARY DESKS

At N. E. A. Convention, Kansas City, Mo., Feb. 26 to Mar. 3, 1917



No. 121. Auditorium Chair.
Semi-Steel Standards. Five-ply Veneers. Full Roll Seat. A splendid medium priced chair.



No. 64. Non-Adjustable Desk.
Semi-Steel Standards. Cherry finished hard maple woods. A good low priced desk.



No. 34. Adjustable Desk.
Semi-Steel Standards. Select hard maple woods. Improved adjusting device. A companion desk to No. 29



No. 43. St. Louis Pedestal Desk.
The most sanitary desk on the market. Makes easy the thorough cleaning of floors.



No. 49. Movable Chair Desk.
The only practical movable desk made. Steel frame construction. Electrically welded. Three styles, each in three sizes, to accommodate all ages.

A FULL LINE OF SUPERIOR SANITARY SCHOOL DESKS AND CHAIRS WILL BE

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Booths Facing Southwest Entrance to Exhibit Floor

During the Convention week. In addition there will be special exhibits in our

RECEPTION ROOMS, HOTEL MUEHLEBACH ROOM "A"—MEZZANINE FLOOR

These Reception Rooms are furnished to provide for the comfort and convenience of Visiting Superintendents. Yourself and your friends are cordially invited to make free use of these rooms. You will find club-like accommodations for personal conferences with no one to intrude or interrupt. Our stenographers will gladly take care of your correspondence. Remember the suite numbers and that you will be welcome, and that the use of these rooms will place you under no obligations to anyone.

SUPERIOR DESKS AND CHAIRS ARE A QUALITY LINE, representing the best obtainable in Modern, Efficient and Sanitary School Furniture, and sold at reasonable prices.

When in the market kindly write us or the representative nearest you (see list below) and we will send descriptive matter, or, if you prefer, arrange to have a salesman call with samples.



No. 29. Semi-Steel Sanitary Desk.

Thoroughly up-to-date, designed to meet the demands for a strictly Sanitary Desk. The plain smooth surfaces of the metal parts prevent any accumulation of dust and germs so prevalent in old style filigree desks.

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Cleveland Seating Co., 550 Rose Building, Cleveland, Ohio Warehouse Stock in Cleveland	Delaware, Maryland, Pennsylvania, West Virginia, Ohio, Kentucky, Michigan, Western New York, Southern New Jersey, Indiana.
Northwestern School Supply Co., 1401 University Ave., S. E., Minneapolis, Minn. Warehouse stock in Minneapolis.	Idaho, Montana, North Dakota, South Dakota, Wisconsin, Northern half Iowa and Wyoming, Minnesota, U. P. of Michigan.
Superior Seating Company, 19th & Campbell Sts., Kansas City, Mo. Warehouse stock in Kansas City, Mo.	Kansas, Nebraska, Missouri, Southern Half of Iowa, Northwestern Oklahoma, Colorado, Utah, Arizona, New Mexico and Northwestern Texas.
Superior Seating Co., 141 West 42nd St., New York City.	Connecticut, Eastern New York and Northern New Jersey.
C. A. Bryant Co., Dallas, Texas Warehouse stock in Dallas, Houston and Longview, Texas, and Texarkana, Ark.	Texas, Arkansas and Southeastern Oklahoma.
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No. 132. Auditorium Chair.
Tubular Steel Standards, Double Feet. 5-ply Veneers, Full Roll Seat. Sanitary. Durable. Medium Price.



No. 31. Steel Desk and Chair.
Adjustable. Tubular Steel Standards. Double Feet. Single Piece, 14 gauge, Pedestal Base. Select hard maple woods, Cherry finish.



No. 37. Adjustable Desk.
Semi-Steel Standards. Woods Select Hard Maple. Steel Box Sides.



No. 33 1-2. Steel Commercial Desk.
Tubular Steel Standards. Hard maple woods. Furnished in two sizes with either chair or settee seat. Stationary or adjustable.



No. 89. Movable Study Chair.
Top of No. 89 Steel Frame Study Chair has following adjustments: Vertical—Horizontal—Tilting. Frame work built entirely of steel, electrically welded in one solid frame. Feet equipped with silent domes or sliding casters.

SUPERIOR SEATING COMPANY

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Stationary and
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Steel Chair Desk
Sets



Indestructible
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Pat. Applied For

Adjustable
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with eight novel features, which merit the critical investigation
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SUPERIOR IN EVERY TYPE

A TRIAL WILL CONVINCE

HEYWOOD BROTHERS AND WAKEFIELD COMPANY

Pioneer Manufacturers of Unbreakable Pressed Steel School Furniture

Commercial Desks, Teachers' Desks and Chairs
Tablet Arm Chairs, Assembly Hall and Opera Chairs
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Wells and Carroll Sts.,
Buffalo, N. Y.
148-154 Tenth St.,
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THE WYOMING SCHOOL CODE.

The state of Wyoming will have an entirely new school code providing a complete body of laws for the elementary and high schools, provided the recommendations of the school code committee, created by the state legislature in 1914, are accepted. The committee, which consisted of five educators, headed by Miss Edith K. O. Clark, state superintendent, worked full two years drawing up the proposed code and secured the expert services of the United States Bureau of Education for a survey of the state educational institutions.

The committee, together with two experts from the Bureau, made a thorough investigation of school conditions by means of questionnaires, extended trips of inspection and school visitations. In its work the committee studied especially the conditions of buildings, the financial support of the schools, the qualifications, living conditions and salaries of teachers, and the character of the instruction. The material collected was thoroughly analyzed and set forth in an exceedingly brief report containing only the recommendations for enactment into law.

In general, the defects of the school system, as reported by the school code committee are the following: (1) Lack of state standards; (2) Inadequacy of present laws; (3) Certain constitutional limitations.

As a result of the study, the committee suggests the following:

I. A State Board of Education to provide for a state board of education to be the administrative head of the educational system, whose executive officer shall be the state superintendent.

II. Reorganization of the State Department of Public Instruction. It is suggested that the department should be strengthened (1) by having the functions, powers and duties of the state superintendent clearly defined by legislative enactment; (2) by relieving the state superintendent from service as secretary of state departments so that his whole time may be given to the schools; (3) making the position appointive instead of elective; (4) by adding to the department at least two field assistants whose work would be inspectorial, advisory and supervisory

to state normals, high schools, agricultural and other vocational schools and all special schools; (5) by providing an annual state appropriation to be expended by the state superintendent for assisting in paying the salaries of district supervisors employed in counties.

III. Non-Political School Officers. The state superintendent should be selected and appointed by the state board of education and the county superintendents by the county boards in a manner similar to the selection and appointment of city superintendents by city boards and college presidents by college boards of trustees.

IV. Supervision of Rural Schools. It should provide for a county board for expert supervision of rural schools by dividing each county, exclusive of city districts, into supervisory districts containing approximately twenty teachers each. Two or more counties may be combined to form a supervisory district.

V. The county Board of Education. Provision should be made for the division of the county into supervisory districts and for the appointment of supervisors. The board should consist of three taxpayers in the county elected by popular vote for six-year terms, one to expire each biennium.

VI. Supervision of City Districts. Provision should be made so that incorporated city districts employing superintendents devoting half or more of their time to supervision, may be independent of the authority of the county board and the county superintendent as far as the administration of schools is concerned.

VII. More Equitable Distribution of the Burden of Support. A state appropriation should be provided for special purposes, such as the employment of assistants and the partial payment of salaries of supervisors employed in counties.

VIII. Qualification of Teachers. Provision should be made for requiring for teaching a higher standard of general and professional education. The legislature should fix an early date after which no teacher may be certificated who has not an education equivalent to graduation from a four-year high school, and a minimum of professional work in an approved school.

IX. Reorganization of Certification of Teach-

ers. Provision should be made for transferring to the state board the administration of the certification of teachers. A division should be created as a Teachers' Employment and Certification Bureau, and should be in charge of a chief appointed by a state board.

X. Vocational Education. Provision should be made for the establishment of vocational courses in agriculture, household science and useful trades for boys and girls, in special departments in selected high schools of the state.

XI. Free High School Privileges. A tax should be levied upon all districts of the county without standard high schools, sufficient to pay the tuition of pupils from such districts to any standard high school in the county.

XII. The state schools for the education of defectives and delinquents should be under the complete control and management of the state board.

Medford, Ore. The school board has prohibited dancing as a part of high school social functions. The order is the result of parents' complaints that social affairs interfered with study and application to work.

Philadelphia, Pa. The school board has successfully conducted a waste paper campaign during the year. About seventy paper baling machines have been put into use with the result that \$1,370 have been saved. In one month alone the income from waste paper amounted to \$98.04.

An unruly pupil in the public schools of New Jersey cannot be made to apologize to a teacher, according to a recent ruling of State Commissioner Calvin N. Kendall, but the boy can be suspended for the act which led to the request for an apology. Commissioner Kendall holds that the boy might legally and properly be suspended for the original offense but not for refusing to apologize.

The pupil had acted in a disrespectful manner to his teacher. He was requested to apologize and refused, and was sent to the principal. After a talk, the boy agreed to apologize but later refused when supported by his mother. He was suspended until such a time as he should make proper apology.

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Have you made a trial of it? A great many have done so, why not you?

Here is a sample order pro-rated; see how little expenditure is required for an experiment.

10 Sheets Form 1	\$.60
2 " " 2	.20
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1 " " 6-7	.10
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1 Binder with Index	4.00
500 Voucher Jackets	3.00
1 Cash Book	1.00
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Transportation Charges prepaid.

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Washington, D. C. The board has adopted a rule prohibiting the maintenance of secret societies in high schools after 1918.

Worcester, Mass. A new school board of eleven members came into existence in December in connection with the inaugural exercises for the city officials. The new school board will shortly undertake the appointment of subcommittees. These are to be limited to two, with a membership of five persons each. The committees suggested are schoolhouse, books and supplies, and finances.

Milwaukee, Wis. The school board has refused a request of Supt. M. C. Potter to make a trial of the 45-minute lunch period in two of the high schools. The present lunch period is one hour and a half.

Sioux City, Ia. The school board has asked the county representatives in the state legislature to work for new legislation, making the minimum age for children entering schools at 7 years instead of 5. The board members are of the opinion that a minimum age limit of 7 years will permit pupils to learn more rapidly because they do not start school as young.

Mr. Hugh B. Marchbank, clerk and accountant for the Minneapolis school board for 26 years, died in a local hospital early in January. Mr. Marchbank who was formerly in charge of the purchasing and business departments of the schools, was noted for his wonderful memory for facts and figures.

Pittsburgh, Pa. Eight dental clinics operated in schools by the board are threatened in a resolution which asks for a ruling by the board's solicitor as to whether the schools may legally operate such clinics. The clinics have been installed at a cost of \$900.

Mr. Prentiss H. Reed has retired as a member of the school board of Newburyport, Mass., after a service of 28 years.

Minneapolis, Minn. The school board is baling and selling waste paper collected in the schools. The paper is sold at a contract price of \$15 per ton.

Detroit, Mich. Mr. Samuel C. Mumford has been elected president of the board.

Chicago, Ill. An efficiency bureau is to be or-

ganized by the board as a check on employes and special departments of the board. The educational department is not included in the work of the bureau.

Dallas, Tex. A commission of three has been appointed by the board to outline a plan for the more intensive use of the schools.

Swampscott, Mass. The board has discontinued the semi-annual promotions for reasons of economy and efficiency. A Junior High School has been opened.

Los Angeles, Cal. The board has created the office of business manager with the appointment of Mr. A. M. Jennings. In addition to the duties of business manager, Mr. Jennings will have charge of the purchase of school supplies and materials and the construction and repair of buildings.

Rockford, Ill. The school board has recently rescinded a rule requiring that all persons connected with the schools be vaccinated and the schools are now open to former pupils who were averse to vaccination. The rule became necessary thru an epidemic of smallpox which had broken out in the city.

Minneapolis, Minn. A study of the open-window method of ventilating schoolrooms is to be made under the direction of business manager G. W. Womrath. It is planned to make initial experiments in two or more schools pending the determination of the cost and efficiency of a ventilating system now in hand.

Cleveland, O. The board has re-elected Mr. Frank G. Hogen as business manager.

Los Angeles, Cal. The board has refused to introduce military training in the high school. It is the opinion of the members that such an important subject should have the united support of the board and of public opinion.

Somerville, Mass. The board has ordered that the semi-annual promotion plan be discontinued.

Bolton, Mass. The board has adopted a four-term schedule, beginning in September and closing the middle of June. One-week vacations are provided in February and in April.

Kewanee, Ill. The board has adopted a standard budget system for anticipating future needs and for the proper distribution of available funds.

A total of \$84,156 is distributed among eighteen items, the largest of which is the expenditure for salaries of teachers and janitors.

Council Bluffs, Ia. The right of the school board to require non-resident pupils in the high school, thru their parents or guardians, to pay to the school district the difference between the actual cost of tuition and the amount which the home districts must pay, has been vigorously protested by parents of such pupils. Last September the board raised the fee to \$63 a year or \$7 a month, which is a little less than the actual operating cost. The parents ask that the board accept pupils for \$31.50 a year which is borne by the home district. The final disposal of the matter will be made by State Supt. A. M. Deyoe of Des Moines.

Cambridge, Mass. The board has ruled that teachers who resign after the opening of the school term shall be paid one two-hundredth of the year's salary for each day they have worked. Formerly teachers received compensation from the opening of the school year in September.

Indianapolis, Ind. With the prospect of a group of modern school buildings occupying the grounds of the present Technical High School property, the members of the Indianapolis Architects' Association have offered the services of its members in preparing a general plan for the buildings.

The five members of the association, Robert F. Daggett, Anton Scherrer, Kurt Vonnegut, Herbert Foltz and Norman H. Hill, who offer their services, explain that it is their purpose to offer a definite, constructive scheme for the development of the architectural features of the property. The association is actuated by a spirit of civic pride and only asks that the board meet the expense of employing draftsmen to draw up the plans.

The possibilities of development of the site are almost unlimited. The property is held by the city for educational purposes and nearly all the present buildings are old structures which will have to be torn down at some future time. A new building has recently been completed to care for the present increase in enrollment.

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AN ANNOUNCEMENT.

The Holden Patent Book Cover Company has just announced that it will fill orders for the well-known patent book covers without any advance in price for the present. The firm has on hand a stock of paper contracted for under market conditions which existed early in 1915, and it will continue to sell its covers at the old rate altho the present cost of paper is more than double.

The success of the Holden book cover has not only been due to the clever arrangement for adjusting the cover to the size or shape of each book, but to the peculiar qualities of the paper which has been made for forty years by one mill under a formula prepared by the late Mr. George W. Holden. The formula produces a paper that is unequalled in toughness, pliability and its resistance to germs.

The firm has given the assurance that all orders will be delivered promptly despite market conditions.

JOHNSON MOVES.

R. R. Johnson & Company, manufacturers of the well known Johnson Window Shade Adjuster, have removed their factory and office from 7208 Eberhart Avenue, Chicago, to Wauseon, Ohio. In its new location the house will enjoy enlarged manufacturing and assembling facilities which have become necessary by the popularity of the Johnson adjusters. Mr. R. R. Johnson will continue in the active management of the business.

A TOWER CLOCK.

The new High School at West Springfield, Mass., illustrated on another page of this issue, is equipped with an ornamental tower clock provided thru the generosity of the Alumni Associa-

tion of the school. The clock was planned for and installed not only because it adds architecturally to the building, but primarily because it is of great practical value to the townspeople. West Springfield includes in its population a great number of railroad employees who are dependent upon accurate time and who find a tower clock as well as a clock bell of considerable value. The High School is located on the most prominent site of the town common, and is visible to a great number of people.

The clock has a five foot illuminated dial made of hard, vitrolite glass. The dial gives a clear, white effect by day and is fully illuminated at night. An automatic time switch is provided to turn on the illuminating current at a predetermined hour and to turn it off again in the morning so that no human supervision is required.

The tower bell is not in the High School but in the Town Hall, and a striking attachment is operated by the mechanism in the High School. The equipment which strikes the bell is very interesting and ingenious. A few minutes before the hour the impulse current received from the master clock starts a small motor generator operating which in turn charges a storage battery. When the exact hour is reached the master clock impulse releases another mechanism, which automatically strikes the proper number of blows upon the bell by means of a powerful electric solenoid and hammer. During the whole striking period, therefore, two sources of current are available; the storage battery and the motor generator, either of which are powerful enough to strike the bell in case the other should be temporarily out of commission. By this arrangement, in addition to the above safeguard the strain on the storage battery is greatly reduced, and its life thereby prolonged.

The entire clock and striking mechanism are a part of the program clock system of the school and were designed and installed by the Standard Electric Time Company of Springfield, Mass.

A DESK SANDER.

The resurfacing of school desks has been one of the most annoying problems in the upkeep of school buildings. It has been for the most part a hand operation requiring a great deal of mus-

cular effort and very unequal results.

A machine that will be of particular interest to school authorities who have a considerable amount of resurfacing of desks is the Little Automatic Electric Surfacing Machine recently



Wayvell Floor Surfacers.



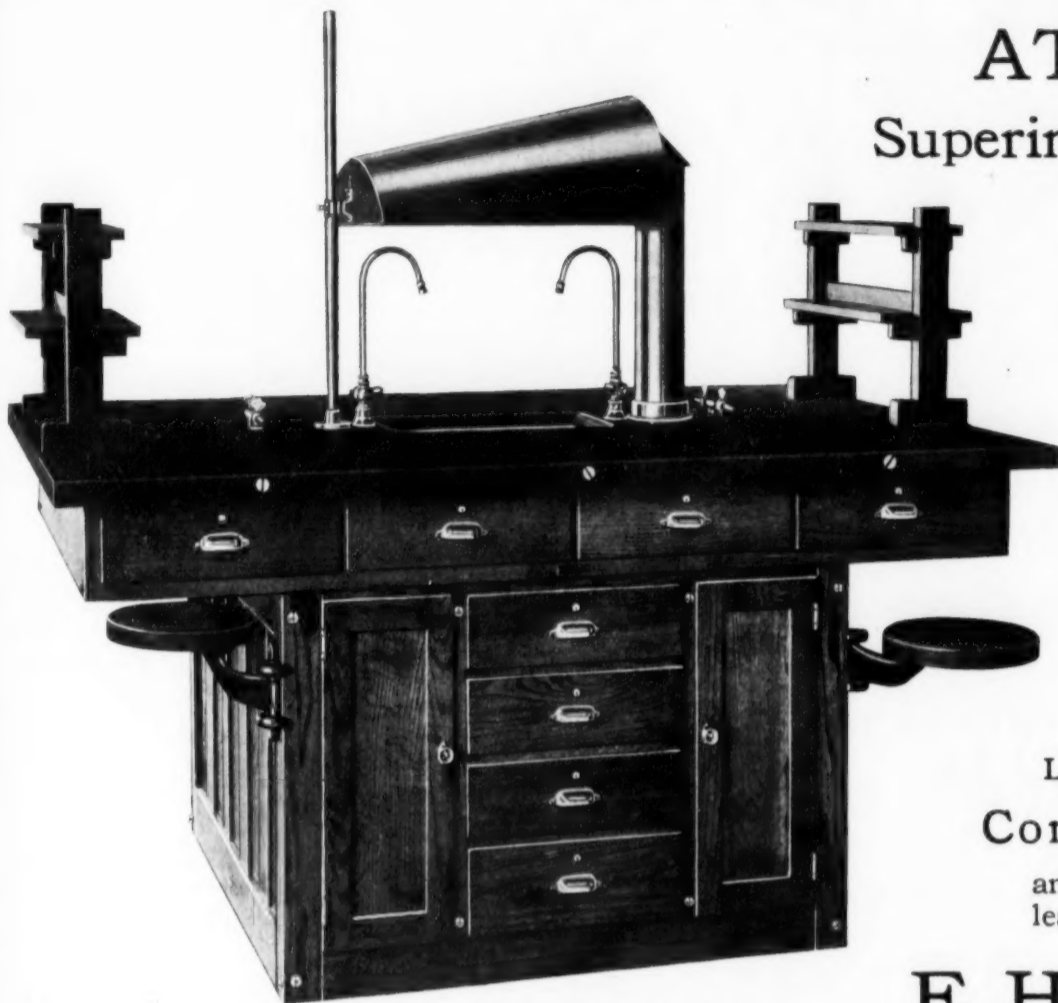
LITTLE AUTOMATIC-ELECTRIC DESK SANDER.
Wayvell Chappell & Co.,
Manufacturers.

placed on the market by Wayvell Chappell & Company, Chicago, Ill. This device is a light, portable machine fitted with a high-speed sanding roller. It may be plugged into any electric light socket. The arrangement is such that the machine will cut continuously as it is moved back and forth. The motor is mounted on a flexible base to secure a yielding control of the sanding roller. The desk tops and backs can, therefore, be treated just enough to remove all scratches and to cut a minimum amount of the wood from the surface.

Wayvell Chappell & Company also manufacture a Floor Surfacing Machine that is considered a standard among carpenters and builders. The machine has an improved sanding roller which makes it possible to secure uniform work throughout a room right up to the base-board. The machine is made in three sizes, with rollers 9, 12 and 15 inches wide and is especially well adapted to use in school buildings where floors must be resurfaced. This machine is so flexible in use that the "border work," which carpenters so much dislike, is made unnecessary.

Circulars describing both the desk sander and the floor surfacing machine will be sent to any reader upon request.

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Chemistry Table No. 2

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DR. MACE APPOINTED.

The recent appointment of Dr. William H. Mace as editor of the Educational Department of Rand McNally & Company marks the high point of the historian's connection with the firm and introduces into the publishing field one of the scholarly figures in American education. Dr. Mace's relationship with Rand McNally & Company dates back to 1904 when his first textbook, "A School History of the United States," was published. During the past ten years this original volume has been followed by a number of other important works, and he has acted as consulting editor on other subjects outside the field of history.

Dr. Mace who retired from Syracuse University last June, has had an interesting career as an educator since he graduated from the Indiana State Normal School in 1876. He began teaching as a very young man in the country schools of Indiana, and after acting as a supervising official for some years he became Professor of History in 1885 at DePauw University Normal School. In 1890 he resigned to spend a year in post-graduate work at Cornell University.

Then began his 25 years of service at Syracuse which terminated with his appointment as emeritus Professor of History and the conferring upon him of the degree of LL. D. During these 25 years the Department of History at Syracuse gained a reputation which made it famous throughout the country. Dr. Mace holds degrees from the University of Michigan, the University of Indiana (M. A.) and the University of Jena (Ph. D.). The last named degree was conferred as the result of study at Berlin and Jena during a leave of absence from Syracuse.

At Syracuse Dr. Mace taught not only history, but for a time also political economy and common law. The faculty of the college at that time included only seven professors and four instructors, and the student body numbered only a few hundred. He stayed long enough in his department to make it one of the strongest in the country and to see his students occupying chairs of history in many prominent colleges.

Dr. Mace is well known to teachers throughout the country as a platform lecturer and an institute teacher. He has appeared in a considerable num-

ber of cities as a university extension lecturer and has served as examiner for higher degrees in New York State.

Among his well known books are the following: "Stories of Heroism," "History Readers," "Little Lives of Great Men," "Beginners' History of the United States" and "Method in History."

In his new duties as editor of Rand McNally & Company he will have an opportunity of rendering a broad educational service and of employing all of those experiences which he has gained during many years as an instructor and teacher of teachers.

CONVENTION OF GREGG SHORTHAND FEDERATION.

The Gregg Shorthand Federation held its annual convention December 26-30 at Chicago. The

business sessions were attended by an unprecedented number of teachers.

The three divisions of the principle of theory were discussed by Mr. Conrad Morris of Rochester, N. Y., Mr. Harold J. Russell of Winnipeg, Canada, and Miss Lula M. Westenhaver of Madison, Wis. President Rasmussen paid a tribute to Gregg shorthand when he characterized it as one of the great educational reforms of the world. Mr. Morton MacCormac, of the Chicago school Board, spoke on the value of shorthand in developing students for future citizenship.

The development of speed in its various aspects was argued by Miss Cora E. Holland of Detroit, Mich., Mr. Fred H. Gurtler of Chicago, and Mr. Arthur G. Skeeles of Elwood City, Pa. Mr. Ernest G. Wiese of the Remington Typewriter Company and Mr. Emil Trefzer of the Underwood, spoke on "The Application of Efficiency Principles to Typewriting." Mr. Paul A. Carlson of Manitowoc, Wis., discussed "Efficiency Principles as Applied to Office Training."

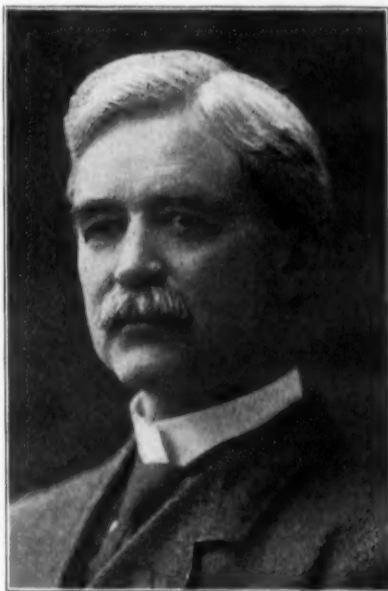
A feature of the meeting was a speed contest at which Mr. Frederick Julian won the 250-word test and also the 175-word test. Mr. Hammell won the 150-word test and Mrs. Daugherty the 125-word test.

The officers elected are: President, James C. Reed, Whitewater, Wis.; first vice-president, John M. Hill, Oklahoma City, Okla.; second vice-president, Nellie C. Collins, Galesburg, Ill.; secretary-treasurer, A. A. Bowle, New York City.

The week of January 15th at Hammond, Ind., was given to a community program which is said to be unique in this country.

During the week some of the best students of community economics and prominent educators were in the city. The International Harvester Company loaned a number of its men for the occasion and Mr. P. G. Holden, head of the extension division, addressed the first mass meeting on the opening day.

The community week was planned and carried out thru the co-operation of the school authorities, the Chamber of Commerce and other public and civic bodies, under the general direction of Supt. C. M. McDaniel.



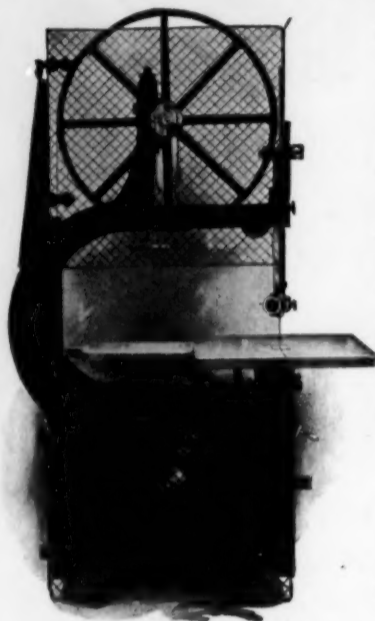
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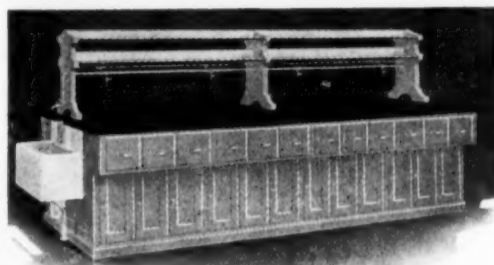
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in building this specialty. You need one of these to
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you ought to have to rapidly and cheaply remove old
varnish etc., from desk tops, tables, counters, or to
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using a coarse sandpaper first, the old varnish is
taken off clean from the wood in about a minute,
or so, per desk top and by finishing with a fine grade
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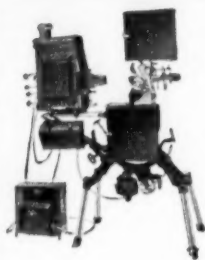
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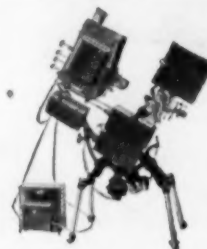
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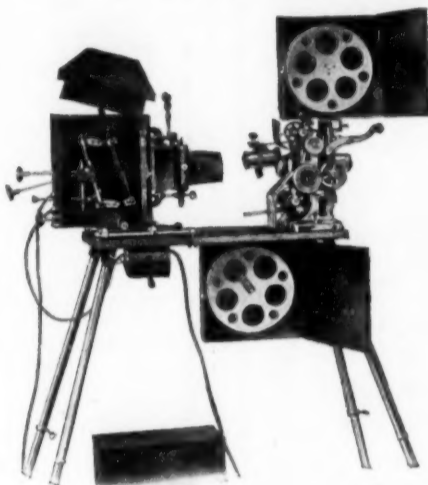
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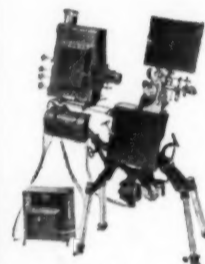


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Book Reviews

Moni the Goat Boy.

Translated from the German by Johanna Spyri. Cloth. Price, 50 cents. J. B. Lippincott Co., Philadelphia, Pa.

A little German classic is here presented in attractive form for American school children. The value of honesty and of a clear conscience have been rarely made more attractive.

Treasure Flower.

By Ruth Gaines. Cloth, 205 pages. Price, \$1.25. E. P. Dutton & Co., New York.

A charming story of a Japanese child is here the vehicle for conveying to American children facts of the life and customs of the Japanese people. The book is beautifully illustrated.

As You Like It.

Edited by J. C. Smith, revised by Ernest H. Wright. Cloth, 200 pages. Price, 30 cents. D. C. Heath & Co., New York, Boston.

This is one of the first volumes of the revised "Arden Shakespeare" which D. C. Heath & Company are publishing. The original "Arden" edition has been a favorite for many years and the necessity of replacing the worn plates has been seized by the publishers to set a group of leading college teachers at work to improve, if possible, the splendid introduction and notes. In the present volume the editor has made no radical changes but has well preserved the emphasis upon the literary aspects of the play rather than the grammatical and purely textual criticism. Enough of the latter has been included however, to make obscure points clear to high school and college students. A few references which were rather British have been Americanized. The mechanical dress of the book has been improved by the use of a large, modern face of type. The book gives promise of a valuable new series of Shakespeare.

The Romance of Labor.

By Frances D. Twombly and John C. Dana. 287 pages. Price, 55 cents. The Macmillan Co., New York.

This book is made up of extracts from recent American novels and tells in narrative and descriptive form, pictures of some seventeen leading industries. The compilers feel that most books that seek to describe occupations, especially for young readers, fail to give adequate impressions of the general character of these callings, of the joys, the dangers and the satisfaction that they entail. And certainly the novelists here represented—little as the reviewer thinks of some of the complete novels from which the extracts are taken—have more insight and imagination and have produced truer pictures than any of the men who have written with the scientific precision of experts.

The Knight of the Lion.

By Annette B. Hopkins. Cloth, 152 pages. Price, 40 cents. The Macmillan Co., New York.

A famous twelfth century tale of a bold knight and fair ladies is here translated from the original French for American Boys and girls.

The Junior High School.

By Ernest P. Wiles. Paper, 24 pages. Free. D. C. Heath & Co., Boston, New York.

A valuable little brochure on the organization and advantages of the junior high school.

An Approach to Business Problems.

By A. W. Shaw. 332 pages. Price, \$2.00 net. Harvard University Press, Cambridge, Mass.

This book deals with the science of business as applied to manufacture. It begins with the producer, discusses the problems of production, organization, material and labor. Then follows a treatment of demand creation, distribution and market analysis. Illuminating policies on plant operation, general administration and external business problems are supplied.

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ican businessman, and particularly that of the manufacturer. He will not only receive a comprehensive idea of the more popular methods employed but will also secure a perspective of the whole system of modern business. It will enable him to determine wherein he has not availed himself of possibilities, and where a strengthening of certain phases and divisions of his activities may be subject to improvement.

Letters—A Brief Course.

By Homer J. Smith. Paper, 24 pages. Price, 10 cents. Published by the author at 414 Greenfield Ave., Milwaukee, Wis.

This brief course has been prepared for boys in trade and continuation schools and will be found especially well adapted to evening classes of adults. The author gives general suggestions which apply to all letters and to business letters in particular and then takes up the mechanics of letter-writing, emphasizing the important points by a series of thirty-one exercises. Every ordinary type of business and social letter is illustrated in these exercises. An appendix contains condensed postal information, business and geographical abbreviations and a brief reference list. The pamphlet is the result of actual teaching experience of the author extending over a period of years.

The Printing Trades.

By Frank L. Shaw. Cloth, 96 pages. Price, 25 cents. Survey Committee of the Cleveland Foundation, Cleveland, O.

This section of the Cleveland School Survey Report presents an accurate analysis of printing as a trade and discusses the educational facilities of Cleveland for preparing boys to enter it. The study makes clear what everyone connected with the printing industry has long felt, namely, that the trade is one of the steadiest, cleanest, best paid of all the mechanical occupations. The report further makes clear that while 1,300 boys now in the Cleveland schools will work in printing shops none are receiving specific education for their future jobs. The report suggests that trade courses for boys who desire to enter printing be established in junior high schools or in a general trade school, that compulsory continuation courses be formed for apprentices and that



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advanced trade courses for journeymen be established in the evening schools.

A Manual of Physical Training and Preparatory Military Instruction.

By Frederick A. Kuenzli and Henry Panzer. 298 pages. Price, \$1.25. The Macmillan Company, New York.

The sub-title of this book is, "A Modified Swiss System Intended to Provide for the Strong Common National Defense of America." A note in favor of "preparedness." Still, a good standard is laid down in the foreword, that physical training seeks to attain health, perfect bodily form, dexterity, formation of character.

Up to the ninth year a great need is development of the heart and lungs. This end is gained thru varied exercises in marching, running, deep breathing. During the ninth the use of skipping rope, small hand ball, wooden hoops, drills on balance beams are introduced. The authors make a special statement that exercises on apparatus are classified according to ages. They also state: "Climbing apparatus, horizontal bar, Swiss and Swedish boom, parallel bars, stall bars and long benches are the apparatus used at our training."

After the tenth year, leg, trunk and arm exercises are used. The severer forms of drill with apparatus are introduced gradually. The exercises of marching, running and order in the more advanced work are taken from the "Infantry Drill Regulations of the United States Army."

Health is Wealth.

By Harry F. Watt, City Health Officer, Ocala, Fla., and Nellie C. Stevens, Principal Primary School, Ocala. Paper, 100 pages. Price, 50 cents.

This well-written, well-arranged manual has been prepared for use in the public schools of Florida.

The subjects of pure air, pure food and drink, good personal habits, narcotics and alcohol are handled from the present-day, scientific point of view. In the chapter on emergencies, the explanations and suggestions are highly practical. For the convenience of teachers outlines have been given for teaching this subject to three groups or classes. A glossary and a good index add to the working value of the manual. Pithy

epigrams as "Chew your food, your stomach has no teeth," "Starve the fly and save the state," "Good air means good work," sharpen entire paragraphs.

It seems this manual is one result of the Sharon law, passed by the legislature of Florida in 1915, which required evils of alcoholic beverages and narcotics to be taught children in the primary grades of the public schools. This manual has the official sanction of the State Superintendent of Public Instruction and the approval of the Florida W. C. T. U. The use of the chapters on alcohol and narcotics is obligatory.

Laboratory Manual for General Science.

By Lewis Elhuff. Cloth, 96 pages. Price, 48 cents. D. C. Heath & Company, Boston, New York, Chicago.

It is pleasant to note that this manual is broad enough and scientific enough to be used to advantage with any standard elementary textbook in science. Tho some special equipment is needed for part of the experiments, an important part may be worked out in the home kitchen, in the yard, in the field. Close observation is required and close observation should lead to correct conclusions.

The Rhyme and Story Primer.

By Etta Austin Blaisdell and Mary Frances Blaisdell. 115 pages. List price, 32 cents. Little, Brown & Co., Boston.

The immortal rhymes of Mother Goose are used here in teaching reading by the word and phrase method. When children have mastered the first half of this primer, new words are built up by a phonic analysis. Capital type, much blackboard work in script, not print, attractive illustrations are features that will call out approval.

Dramatic Reader.

By Pearl Beaudry Wood. 341 pages. Price, 60 cents. Longmans, Green & Company, New York and Chicago.

Widely different situations and events in England and the United States are depicted in these dramatic selections. Designed for use in the upper grammar grades and the junior high school, they are to be read, not acted. But the spirited talk may result in easy, natural, even

spirited reading. As a situation nears a crisis, a glance, a gesture may be naturally used for emphasis. Thus pupils will come to read understandingly, they may come to read finely. And fine reading is such a fine art! Interest in selections may not improbably lead to a reading of the entire text—a most desirable result.

The explanatory notes are models of compact brevity. The pronunciation of unusual and technical words has not been forgotten. In the biographical notes readers will learn of the early, moulding surroundings and mature work of these authors.

Natural Freehand Writing.

By John H. Haaren. Six manuals, 32 pages each. Price per dozen, 96 cents. D. C. Heath & Company, Boston, New York, Chicago.

Stress is laid upon taking and keeping a defined position of arm, hand, body. Drills to obtain free and rapid movement of the muscles used in writing are found upon every page, and constant practice in these exercises is deemed of prime importance.

Dairy Farming.

By C. H. Eckles and G. F. Warren. 309 pages. Price, \$1.10. The Macmillan Company, New York.

The high nutritive qualities of milk and its increasing use render it most fitting. The initial book of "Farm Series" should deal with dairy farming. Two experts, one in dairy farming, the other in farm management, have given to the industrial world a book which for breadth, thoroughness, practicality, scholarship is seldom equalled.

Points of different breeds of cattle, their selection, improvement, management, feeding; milk with its important products, butter and cheese; the size, arrangement and cost of a dairy barn are discussed at some length. Systems of farming, methods of renting dairy farms, cost of production and marketing are explained and compared by the second expert. Then he has placed, in a chapter all by themselves, "other important factors," and they are truly important.

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(Concluded on Page 82)

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ROBT. KING ATWELL { Prof. of Mathematics
Univ. of Porto Rico

PREFACE BY
FRED'K. K. FLEAGLE
Dean Univ. of Porto Rico

The author of this work has felt that there is a place in the intermediate high school, where a course that will sum up the arithmetic of the grades, and give some insight into the coming mathematical problems of algebra and geometry, might be of use, especially if this course is linked up with the work in mechanical drawing, manual training and elementary surveying, so that the student may see the application of the mathematical theories that he is studying, and have the pleasure of actually accomplishing something in the way of a simple surveying instrument and a map of the locality.

Another place which this work will fill is that of a review course in mathematics for prospective teachers. Normal students who have finished their high school mathematics, ought to have a general course covering the most important points of elementary and secondary mathematics, worked out from the standpoint of a teacher, and with emphasis on "application." Such a course as that outlined in this book will compel the student to apply theory to practice.

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Barnes Graham	11
Parke Schoch	11
Spencerian	11
New Practical	10
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(Concluded from Page 80)

from "butter and cheese produced and consumed in the United States" to "Wing's method of balancing rations" are tabulated in some fifty tables. A group of maps shows another set of facts. Questions, problems, laboratory exercises call for experimental work, while lists of books and bulletins guide collateral reading. A minute scale of points for different breeds of cows directs examinations made by students, topics not handled in any other way are worked out in graphs. Illustrations are worthy of the name.

This book marks the growing opinion that more systematic, more intelligent farming is becoming not only desirable, but almost imperative.

Longmans' English Grammar.

By George J. Smith. 333 pages. Price, 65 cents. Longmans, Green & Co., New York, Chicago.

In his preface the editor pays a just tribute to the original author of Longman's grammar, David Salmon. This Englishman must have been generously endowed with common sense as he wrote a textbook having simple statements and a wealth of illustrations. Here are a few of the more individual points. The mood of auxiliaries is determined by their use. An instance of applied common sense. The functions of infinitives and gerunds have been stated clearly and positively. This topic has not been muddled by reviewing the doubts and differences of others. Paragraphs on the meaning of prepositions, on nicety in their use, on their power of making an intransitive verb transitive have made an unusually strong chapter. Since it is admitted the nature and use of every element is placed directly before the eye in diagramming, this method is used, but it is not overdone. Differences in type

indicate the relative importance of different paragraphs.

In this revised edition, the changes are comparatively few. The principal one is making the terminology agree with that officially adopted for public schools of New York City. It is positively encouraging to look over a textbook not burdened with language lessons, but which does give a thorough-going course in English grammar.

A Study of Plants.

By Mabel E. Smallwood. 87 pages. Lane Technical School, Chicago, Ill.

This manual, meant to be a help to busy teachers, may be used with any standard elementary textbook in botany. It provides suitable work for both a fall and a spring semester. That for the fall deals with weeds, seeds, mosses, lichens, ferns, and contains an attractive program of work. Perhaps the more outstanding sections are those under summaries, reviews and library work. Drawings, with well-arranged, carefully-kept note-books are thought essential to satisfactory results.

TEXTBOOK NEWS.

The well-known Freeman charts for judging handwriting have been issued by Messrs. Houghton Mifflin Company, in separate form and are available for school use.

Supt. E. C. Hartwell of St. Paul, Minn., has announced the selection of three new textbooks by the special committees of teachers appointed to choose the books. The new books are the Natural Method Readers (Scribner); the Hamilton arithmetics (Am. Book Co.); and the Hunt revised speller (American). The final use of the books is dependent upon the ability of the school department to reach a satisfactory price agreement with the publishers.

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Economy in Secondary Education is the title of a new book just issued by Messrs. Houghton Mifflin Company. The author is Prof. W. F. Russell who has made a comprehensive study of both European and American practices in economizing school time.

Isaac Pitman Shorthand Dictionary has been added to the regularly adopted list of textbooks for New York City. In the past the book was listed as a reference work only.

State adoption of textbooks includes not only the subject matter of books, but the books themselves, and school trustees and teachers must not permit books to be procured in an improper way or thru improper channels, according to a recent opinion of Attorney General Logan of Kentucky. Mr. Logan holds that local school authorities are responsible for the selection of books and that they have the right to prohibit the use of unauthorized books.

Mr. Will C. Wood, Commissioner of Secondary Schools, Sacramento, Cal., announces that he has received a favorable report from the expert readers in Spanish on McDonald's Spanish Commercial Reader, published by Isaac Pitman & Sons, New York, and that this text will appear on the official list of high school textbooks for the State of California for the year 1917.

RECENT BULLETINS AND REPORTS.

Annual Financial and Statistical Report of the Board of Education of the City of New York for the years 1911-1915. The volume gives the report of the Committee on Finance, a table of definitions and explanations on the principal facts contained in the report; a second section gives the financial statements, cost exhibits, financial and statistical charts, district attendance statements, janitorial statement of disbursements and sum-

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maries of property schedules; a third section gives the annual statement for 1915 showing the property schedules, financial and physical data; a fourth section takes up the subject of real estate, showing the condition of the school plant where changes or acquisitions have occurred, and the floor plans of types of high school buildings; the fifth and last section is devoted to photographic illustrations of various activities conducted by the board. These include day elementary classes in handwork and mechanical drawing, kindergarten work, elementary shop-work, drawing, construction and designing, open air classes, domestic arts work and classes for blind pupils.

Annual Report of the Department of School Hygiene, Milwaukee, Wis., 1916. The report gives a comparative table of general contagious diseases among school children, the number and per cent of physical defects among pupils, the work of the dental clinic and open air classes, and a discussion of the problem of drinking water and bubblers in schools.

Minutes of the Conference of County Boards of Education of Alabama, December, 1916.

List of References on Child Labor. Compiled under the direction of H. H. B. Meyer, chief bibliographer of the Library of Congress, assisted by Laura A. Thompson, Librarian of the Children's Bureau. Industrial Series No. 3, Publication No. 18, 1916. United States Department of Labor, Children's Bureau.

University Training for Public Service. A report of the meeting of the Association of Urban Universities, Nov. 15-17, 1915. Bulletin No. 30, 1916, United States Bureau of Education.

Financing the Minneapolis Schools. Monograph No. 2, 1916. Prepared by Albert J. Lobb under the general direction of Supt. Frank E. Spaulding. The pamphlet shows briefly and clearly the revenues and expenditures of the schools, the growth of expenditures, distribution of finances, and the status of new school construction compared with other cities. Diagrams, graphs and tables give accurate ideas as to the subjects treated.

A Review of the Rockford (Ill.) Schools, 1915-16. The information contained in the pamphlet

has been collected and prepared by the staff of the schools under the direction of Supt. R. G. Jones. It carries to the homes of the city information concerning physical property, curriculum, attendance, measurable results in teaching and other matters of vital interest to the school patron and taxpayer. It discusses briefly the lighting, ventilation, heating, plumbing, and safety provisions as compared with modern school standards, shows the growth of the school population and the present and future needs in school facilities, shows the means taken for improving the efficiency and general status of the teaching staff, discusses the growth of the attendance department and the value of its services to the schools, and gives the distribution of costs in the various buildings. Lists of charts and tables are given in the back.

Forty-fifth Annual Report of the Owensboro (Ky.) Schools, 1915-16. James H. Risley, Supt. The pamphlet discusses enrollment and attendance, retardation, the junior high school, the need and the formation of a building policy for the board, the value of standard tests in arriving at the general efficiency of the teaching methods, savings banks and thrift, the work of social centers, the need of more vocational courses, dental inspections, and the application of standard tests in school organization and efficiency to local school systems.

Seventy-ninth Annual Report of the Superintendent of Public Instruction of Michigan, 1915-16. The book discusses the work of the county normal training classes, recent publications of the department, progress in school building in Michigan, extension of educational effort, the results of a study of retardation, acceleration, elimination and repetition, expenses for state educational institutions, and a list of the accredited high schools. A number of statistical tables are given.

The Mankato Junior-Senior High School, 1916-17. The pamphlet contains the courses of study, rules and regulations of the Mankato (Minn.) High Schools.

The Planning and Construction of High School Buildings. By Horace A. Hollister, High School Visitor for the State of Illinois. Published by the

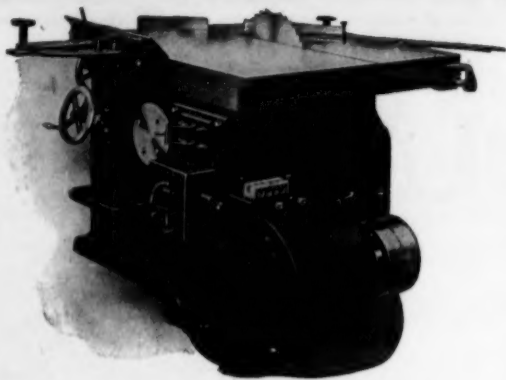
University, Urbana, Ill. The pamphlet takes up the planning of high school grounds, the type of building, proper corridor lighting, gymnasiums, athletic fields, auditoriums, rest rooms, conservatories, laboratories and lecture rooms, and rooms for special subjects. A number of illustrations show the leading features to be considered in planning and constructing high school buildings.

Effects of Hookworm Disease on the Mental and Physical Development of Children. A study conducted by Dr. Edward K. Strong for the international Health Commission. Published by the Rockefeller Foundation, New York.

State Pension Systems for Public-School Teachers. Bulletin No. 14, 1916. Prepared by W. Carson Ryan, Jr., and Roberta King, for the Committee on Teachers' Salaries, Pensions and Tenure of the National Education Association. Published at Washington, D. C. The purpose of this bulletin is to show the extent of the teachers' pension movement in a brief and summary way and to collect in convenient form pension legislation for public-school teachers in the United States.

Smull's Legislative Handbook and Manual of the State of Pennsylvania, 1916. Compiled by Herman P. Miller and W. Harvey Baker. Published by the state printer, Harrisburg, Pa. The present volume has been reset to include additions and changes which have become necessary since the publication of the last edition. In addition to information relative to the state government, the book gives the school attendance of the United States by states, the statistics of the public schools of Pennsylvania, the organization and personnel of the State Departments of Education, and a complete list of the city superintendents, borough and township supervisors.

Rules and Regulations of the Wayne County Board of Education, Jesup, Ga., 1916-17. The pamphlet enumerates the duties of school trustees, gives rules governing the preparation and filing of reports, offers directions for pupils in the use and care of school grounds, and furnishes the necessary requisites for pupils who have completed the work of the elementary school. The pamphlet was prepared under the direction of Mr. B. D. Purcell, County Supt.

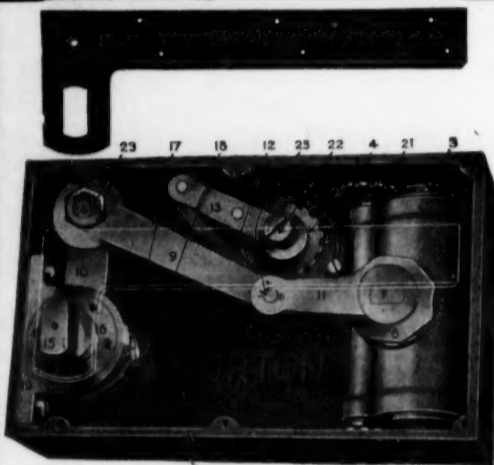


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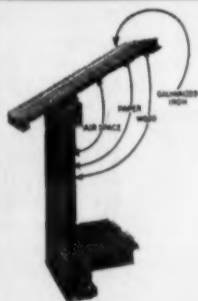


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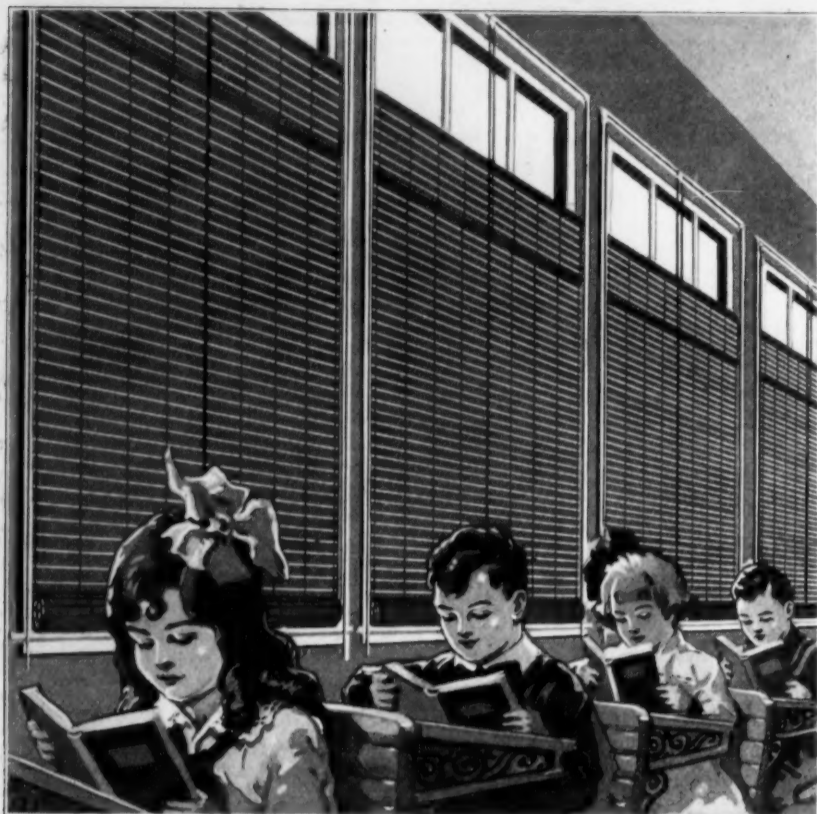
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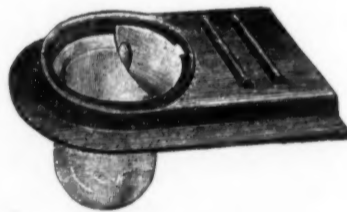


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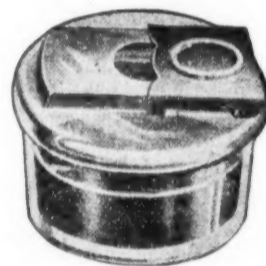
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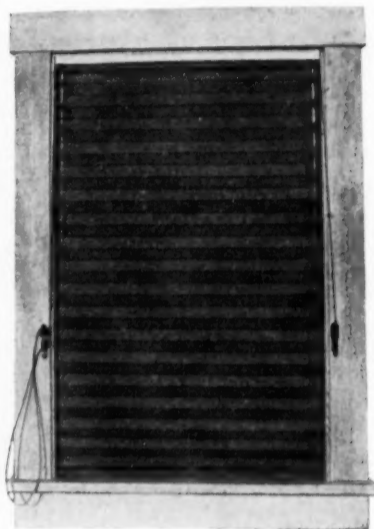
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COMPANY

Office of the President
St. Paul, Minnesota

May 10, 1916, D1.

Mr. W. S. Shaft,
Perennial Shade Company,
Faribault, Minnesota.

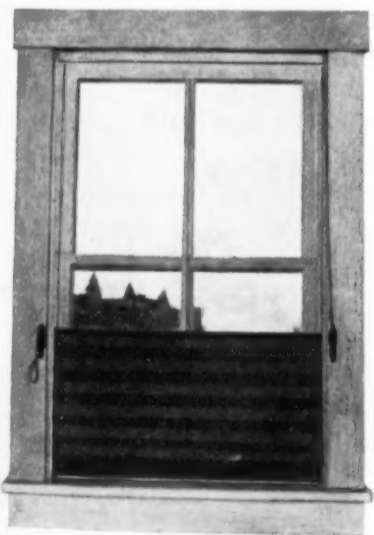
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Referring to your recent letter asking as to my opinion of the Perennial Shades installed in our general office building.

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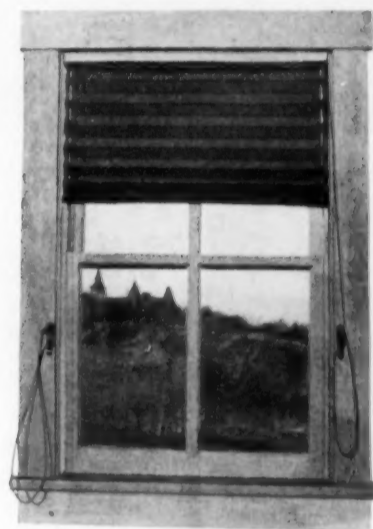
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Faribault, Minnesota
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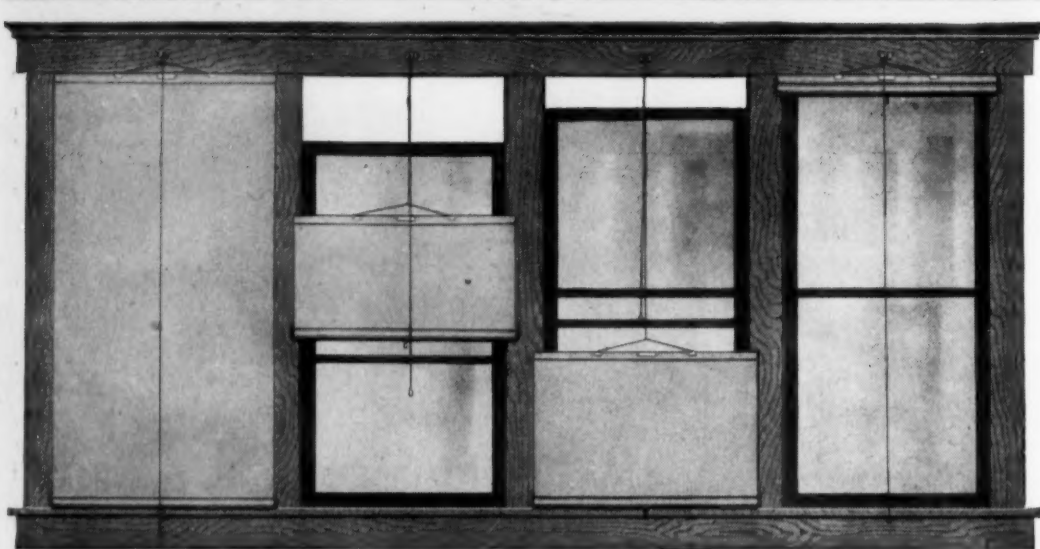
Yours very respectfully,
(Sgn.) Jno. Munroe



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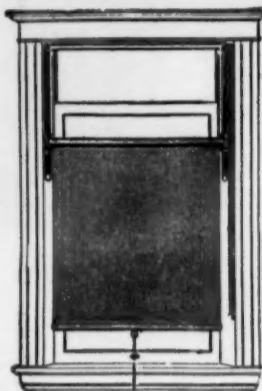
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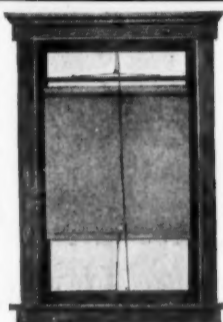
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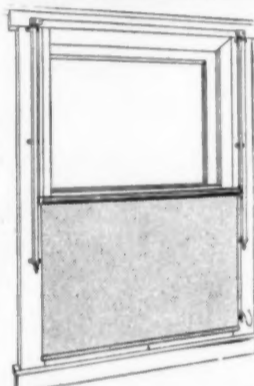
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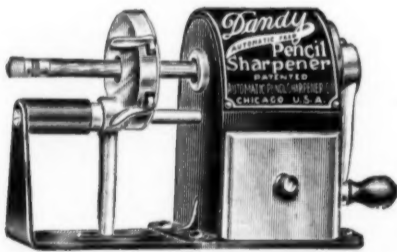
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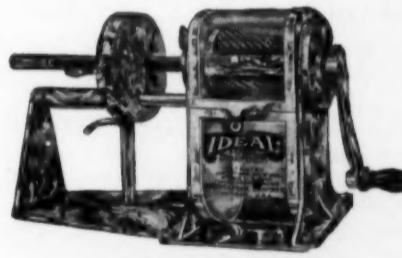
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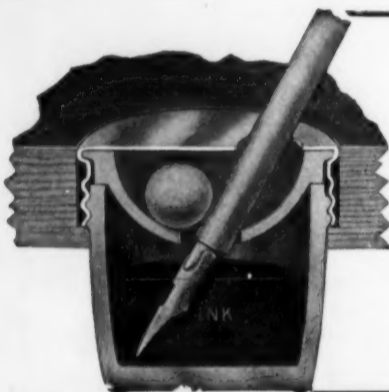
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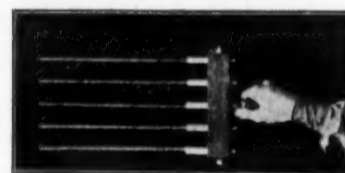
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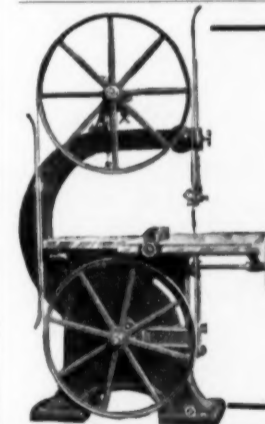
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Plausible.

The pupils of the upper grades in the Milwaukee schools visit the Public Museum each year. After a lecture on some division of the collections, they are free to roam about the building.

Two boys, who were gazing in wide-eyed wonder at a mummy, could not make out the meaning of a card which bore the lettering "B. C. 526."

One said: "What's that mean, Jimmie?"

"I don't know," answered Jimmie, "except its the number of the automobile that killed the feller."

Ambition and success had been the subject of a little classroom talk by the teacher, but small Samuel did not seem to be interested. Squirming in his seat, he attracted the teacher's attention and she called him to the desk.

"Aren't you ambitious to succeed in life, Samuel?" she inquired.

"No, Miss Smith," was Samuel's reply.

"You astonish me, Samuel. All little boys should wish to be successful. Some day you might be the President of the United States and be a great man. Wouldn't you like to be a President?"

"I wouldn't have a chance, Miss Smith."

"What makes you think you would have no chance, Samuel?"

"'Cause so many are trying for it now. Why, Miss Smith, every feller in the class is trying for that job."

Fitting.

School Board Member: "Do you know of any good remedy for a deadlock?"

Superintendent: "I should suggest a key to the situation."

Miss Primer has a theory for perfecting the education of children.

What is it?

That mothers ought to exchange children because they always have such strict ideas how other women's children should be brought up.

Too Much Reform.

Mr. Curran and Mr. McManus spent their Saturday half holiday in artistic pursuits. Among the objects examined was a fine new public building. The feature of this building that appealed most strongly to Mr. Curran was an inscription cut into a huge stone.

"MDCCCXCVIII," he read aloud. "What does them letters mane, Tim?"

"That," replied cultured Mr. McManus, "stands for 1898."

"Oh," replied Mr. Curran. Then, after a thoughtful pause, he added:

"Don't yez think, Tim, that they're over-doin' this spellin' reform a bit?"—N. Y. Times.

"Now," said the professor of astronomy, who was trying to be entertaining, "the most beautiful star I know of is —"

"Be careful professor," whispered the hostess, "the lady to whom you are speaking is a prima donna."

A Painless Death.

A teacher in the factory district of a New Jersey town has been giving the children earnest lectures upon the poisonousness of dirt.

One morning a little girl raised her hand excitedly and pointed to a boy who seldom had clean hands.

"Teacher," she said, "look quick! Jimmie's committin' suicide! He's suckin' his thumb."—Success.

Grace: Are you girls going to have a daisy chain at your commencement exercises?

Maude—I should say not. There are none but rich girls at our school. We are going to have an orchid chain.

What It Looked Like.

Juvenile remarks are not always so naughty as they seem. Small Sam, for instance, had no intention of using bad language when he got into such severe trouble in class.

His teacher was trying to press home certain facts concerning a volcano. In reviewing the lesson she drew on the blackboard her own conception of a flaming mountain, using colored crayon with extraordinary effect.

"What is it?" she asked, the picture finished. The scholars shook puzzled heads.

"You don't know? Well, what does it look like?" the teacher persisted.

Piped Sammie, whose home boasts a colored pictorial Bible:

"I think it looks like hell."

Mr. John Wanamaker, the merchant, is an active and highly valuable member of the Philadelphia board of education. The most pressing duties in connection with his great stores do not deter him from attending meetings and regularly visiting the schools.

One day after Mr. Wanamaker had addressed the assembled children of an elementary school, he asked: "Now is there anyone present who would like to ask a question?"

A boy of 7 or 8 piped up:

"Please, Mr. Wanamaker, how much do them gray baseball suits in your window cost?"



"Don't tell me you're a college graduate! Why, this letter of yours hasn't a single misspelled word in it!"—Life.

Latin and the Law.

While one thing essential to a cultured lawyer is a thoro knowledge of Latin, it is not necessary that he should parade his classical knowledge, for he might be "taken down a peg," as was the young lawyer who displayed his learning before an Iowa jury. His opponent replied: "Gentlemen of the jury, the young lawyer who has just addressed you has roamed with Romulus, canted with Cantharides, ripped with Euripides, socked with Socrates, but what does he know about the laws of Iowa?"

A drawing master, who had been worrying a pupil with contemptuous remarks as to his want of skill in the use of the pencil, ended by saying:

"If you were to draw me, for example, tell me what part would you draw first?"

The pupil, with a significant meaning in his eye, looked up into his master's face and quietly said:

"Your neck, sir."

Safety First.

"Now, doctor, how old do you believe I am?" said a teacher to the late Irwin Shepard, at a reception to the National Education Association.

"Well," said the doctor with his unfailing courtesy, "That is a hard question. I should say that you look ten years younger than seems possible considering the teaching experience you have had."

"Do you expect to trade in your old car for a new one next spring?"

"I did think I would, but I've given up the idea."

"Why?"

"My boy and several of his sophomore friends took it out this morning."

A certain New York cleric is distinguished by a marked peculiarity in the way of using his lips when speaking. One day this clergyman was to address a slum Sunday school. During the school's preliminary session it became the duty of one of the teachers to bereave a small but determined pupil of her cherished chewing gum. The child sat silent, wearing a sulky, injured expression, until the visiting divine began speaking. Then, leaning toward her teacher, she inquired shrilly:

"Why didn't you make him take out his gum, too?"

Unusual Sunrise.

A boy heard his teacher say that the sun would rise over the tropic of Capricorn on certain days. He listened attentively, but failed to comprehend, so when he came home he told his mother, with a good deal of seriousness, that the sun was going to rise over the top of the Kaffir corn. The boy's father had raised some Kaffir corn last summer.

During the Reading Lesson.

Teacher: Why don't you pause? Don't you know that a period means a rest?

Pupil: Yes, teacher, but I ain't tired.

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